# CHAPTER FIVE
# STATUTORY SECTIONS

Chapter Five discusses the following topics that are required to be addressed by environmental impact statements and reports by federal and/or California statutes, regulations, or policy:

* Relationship Between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-term Productivity
* Irreversible and Irretrievable Commitment of Resources
* Growth-Inducing Effects of the Proposed Action
* Energy Consumption and Conservation
* Environmental Justice Considerations
* List of Preparers

Following these sections, Chapter five presents a list of accrnyms, a glossary, and a list of references cited by this report.

## 5.1 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Implicit in the West Mojave Plan's goal of conserving sensitive species while streamlining FESA and CESA permitting procedures to attract development to desert communities is a trade-off between a permitted short-term use of the desert environment in exchange for the establishment of conservation strategies that would be effective in the longer term.

In the short term, the Proposed Action allows dispersed commercial and recreational uses to be made of desert lands, including off highway vehicle recreation, mining, livestock grazing, filming and other uses, including lands within the Habitat Conservation Area. New disturbance, of up to 1 percent of the surface area of the HCA (22,000 acres) could occur. Streamlined permitting procedures could encourage infill and growth on the periphery of desert communities, converting that land for the foreseeable future to uses incompatible with habitat conservation.

In the long term, despite these uses, the establishment of a habitat conservation area, including tortoise DWMAs and other conservation areas, would ensure that desert ecosystems would be maintained and enhanced. Although one percent of the land surface of the HCA could be disturbed, and about 1.3 percent is currently disturbed, nearly 98 percent of the 2.2 million acre HCA would be maintained in an undisturbed condition. Use of these lands would be conditioned by the requirements of over 70 wildlife and plant conservation strategies. An acquisition program to acquire and enhance the protection of private lands within the HCA would be established. Although this may reduce local government property tax revenues, those

losses could be more than offset by revenues gained as a result of increased development attracted to the desert by streamlined FESA and CESA compliance procedures.

Closure of redundant off highway vehicle routes, and those routes that might affect sensitive resources, in the long term would enhance habitat quality. Appropriate access to sites visited by the public would be maintained, however, thus minimizing losses of recreation and commercial access. This would be accomplished by the design of a network that provided appropriate access in a manner that avoided sensitive resource sites. Access would continue to be provided for a variety of activities, including equestrian staging areas, recreational touring, rockhounding, mineral exploration, and other legitimate uses.

Provision of plan flexibility through a monitoring and adaptive management program would also contribute to long-term resource productivity. The plan could be refined continuously in response to changing conditions and varied effectiveness of plan programs, to ensure that only the most effective components of the conservation strategy were retained, while less effective measures were dropped or replaced.

## 5.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Authorized take of habitat would result in the permanent loss of wildlife and plant habitat. Once new ground disturbance occurs, the natural habitat eliminated by this would no longer be available to sensitive wildlife and plant species, unless habitat restoration programs proved to be effective. This could include desert tortoise habitat, primarily outside DWMAs, but possibly including portions of special review areas and biological transition zones. The most likely habitat to be lost would be habitat that still exists within and in immediate proximity to urban areas. Direct take of individuals could also occur. Given the large scale of the conservation areas proposed by Alternatives A, C, and D, these disturbances are not likely to threaten the survival and recovery of sensitive species.

Designation of conservation areas and closure of routes within those areas would commit recreation opportunity resources to ecosystem conservation for the duration of the term of the West Mojave Plan.

All undertakings that involve ground disturbing activities would require site-specific cultural analysis that may include surveys, recording of historic and prehistoric sites, and determinations o eligibility of sites to the National Register of Historic Places. Potential impacts to Native American values would be analyzed. Mitigation measures would be identified and implemented if necessary. Avoidance of impacts to cultural resources is the preferred mitigation measure, but is not always possible or feasible. A decision to mitigate impacts to cultural resources by data recovery, instead of avoidance and consequent removal of cultural resources from the area constitutes a residual impact to the site. Sites would rarely, if ever, be completely excavated. Mitigation by data recovery results in a steady loss of archaeological sites, and reduces opportunities for interpretation in their natural context. Data recovery may negatively impact Native American values that cannot be mitigated.

Allotments no longer available for grazing use would be lost for the reasonably foreseeable future. Allotment closure would mean a loss of livestock production in the DWMAs. Abandonment of range improvements may lead to their deterioration and loss.

## 5.3 GROWTH-INDUCING EFFECTS OF THE PROPOSED ACTION

Population growth in the West Mojave is projected to range between 1.59% and 2.21% per year for the 30-year term of the West Mojave Plan. Adoption of streamlined procedures for complying with the California and federal endangered species acts increases the likelihood that growth rates will approximate the latter figure. This is based upon the assumption that applicants for discretionary development permits will have a higher incentive to pursue high desert projects due to the reduction and/or elimination of costs associated with obtaining those permits, and (more significantly) the elimination of delays currently inherent in the permit approval process. This growth would be focused in the vicinity of currently urbanized areas, including incorporated cities, rather than in more remote desert regions.

The Plan is not expected to have a significant growth-inducing effect on the development of BLM-administered public lands. BLM permitting procedures are already relatively streamlined, so the difference between the current situation and the situation that would be established by the plan would be relatively minor.

Once exception could be an enhancement of opportunities for the growth of the eco-tourism industry on public lands. Establishment of a route network, publication of the opportunities it offers, and implementation of a desert user education program could increase use of certain areas of public lands near recreation areas of particular interest to visitors. This could have a spillover effect on nearby desert communities, which would be well positioned to provide services, information and supplies to desert users.

## 5.4 ENERGY CONSUMPTION AND CONSERVATION

The West Mojave Plan would result in relatively little change to regional levels of energy conservation and consumption. To the degree that the Plan induced growth in the West Mojave population, it could contribute to an increase in energy expended by transportation and commercial activities. This would be counterbalanced by a pattern of development that focused on existing urban areas and cities, with relatively less “leap frog” development occurring than would be the case in the absence of the Plan.

# 5.5 ENVIRONMENTAL JUSTICE CONSIDERATIONS

## 5.5.1 Introduction

Executive Order 129898, *Federal Actions to Address Environmental Justice in Minority Populations and Los-Income Populations*, requires each federal agency to "identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority populations and low-income populations." The Council on Environmental Quality has developed guidance for assessing Environmental Justice with NEPA procedures (Environmental Justice Guidance under the National Environmental Policy Act, 1997). Following CEQ guidance, the BLM analyzed the effect of its actions on human health which include bodily impairment, illness, infirmity or death, and environmental effects which include ecological, cultural, human health, economic or social impact.

## 5.5.2 Composition of the Affected Community

The planning area contains a relatively homogenous population base when compared to the State as a whole. The single largest racial-ethnic group includes non-Hispanic whites representing 58.0 percent of the entire population base compared to 46.7 percent for the State. Despite its relatively homogenous character, the West Mojave has experienced increased racial-ethnic diversification since 1990 when 73.9 percent of the population base consisted of non-Hispanic whites. Racial-ethnic groups contributing most to the areas increased diversification include Hispanics (from 16.4 percent in 1990 to 25.9 percent in 2000), Blacks (from 5.8 percent to 9.3 percent), and persons of some other or mixed race (from 0.2 percent to 3.1 percent).

West Mojave subareas with the greatest racial-ethnic diversification include Los Angeles and San Bernardino, the two most populated subareas. In all subareas the single largest racial-ethnic group includes Non-Hispanic Whites (73.7 percent – Inyo; 70.7 percent – Kern; 61.5 percent – San Bernardino; and 50.5 percent – Los Angeles). Hispanics make up the second largest single racial-ethnic group (29.5 percent – Los Angeles; 25.0 percent – San Bernardino; 21.5 percent – Inyo; and 16.6 percent – Kern).

## 5.5.3 Public Participation Strategies

Within the West Mojave planning area, the population was invited to participate through the mass media, and mailings to organizations and to individuals. As explained more fully in Chapter 1, representatives of over 100 desert user groups, businesses, environmental groups and others, as well as nearly 1000 private individuals, participated in meetings during which the conservation strategies were developed. Through nearly 50 task group meetings, several dozen Supergroup meetings and frequent public meetings, every effort was made to ensure that all desert residents and those using the desert had a full opportunity to participate in plan preparation. The planning process received broad publicity, and public meetings were held repeatedly in all major desert urban areas.

### 5.5.4 Tribal Representation In The Process

Eight tribal governments who might attach religious and cultural significance to historic properties within the planning area were contacted in June 2000 and from May to July 2001. These included the Lone Pine Paiute Shoshone, Timbisha Shoshone, San Manuel Band, Morongo Band, 29 Palms Band, Fort Mojave Tribe, Chemehuevi Tribe, and Colorado River Indian Tribes. Contact was made via letter and phone. When contacted by phone in July 2001, the Lone Pine Paiute Shoshone, Timbisha Shoshone, Fort Mojave Tribe, Chemehuevi Tribe, and Colorado River Indian Tribes requested additional information, and information packets were sent to those tribes. In August 2001 a briefing was presented to the Native American Lands Conservancy at their request. As a consequence of contact, no tribe or band identified religious or cultural significance to historic properties within the planning area.

The proposed motorized vehicle access network would continue to provide Native American with access to locations on public land. The network was specifically designed to provide for a multitude of access needs, subject only to the compatibility of the network with the conservation of sensitive species. Consequently, modifications of the network tended to take the form of the elimination of redundant routes in sensitive habitat, rather than completely closing areas of the desert to public access.

### 5.5.5 Health and Services

The ability of the community to provide health and services to protected groups would not be affected by the Plan's conservation strategy, nor would existing programs to ensure that adequate infrastructure was provided as new development occurs be degraded by adoption of the streamlined permit procedures. Requirements to upgrade management of regional landfills and transfer stations might, in fact, provide human health benefits as well.

The analysis of the environmental consequences of the proposed alternatives, including the proposed action, did not demonstrate or reveal any direct or indirect effects on human health. The alternatives have an inconsequential effect on air quality, water quality, or do not result in production of toxic or hazardous products. The proposed plan results in minor loss of recreational opportunities such as vehicle driving and exploration, but would continue to provide full access for camping, hunting and rock hounding. The desert experience, as expressed in wildlife presence and the ecological health of the landscape, would improve with time. There is no evidence to indicate that the minority and/or low-income populations would be disproportional consumers of these recreational opportunities.

### 5.5.6 Community Character

The character of the communities of the Western Mojave Desert would not be affected by the conservation strategies to be implemented through the West Mojave Plan. Ranching and mining would continue. The nature of the communities as bedroom suburbs to Los Angeles, and providers of services to long distance travelers, and as home to workers at numerous federal and military facilities, would remain essentially unchanged by the plan and the streamlined permitting process. The travel, dining and recreational services and associated employment,

which customarily involve low-income workers, is not affected by the proposed action and decisions in the alternatives.

Economic consequences of the streamlined FESA and CESA permitting program were found to be generally beneficial to the economy of the planning area. No disproportionate impacts on any protected group were identified as a result of the permit streamlining.

## 5.6 LIST OF PREPARERS

Table 5-1 lists the primary authors of the EIR/S, together with their area of responsibitily. The list does not include the many persons who were consulted by the authors, or reviewed sections of the document while it was being prepared. Nor does it include the many members of the West Mojave Supergroup who contributed to the development of the proposed action and alternatives.

**Table 5-1**
**Primary EIR/S Authors**

| NAME | AFFILIATION | RESPONSIBILITY |
|---|---|---|
| West Mojave Planning Team | | |
| William S. Haigh, Esq. | Bureau of Land Management | Project Manager |
| Dr. William Boarman | U.S. Geological Survey, Biological Resources Division | Biologist<br>Desert Tortoise Background Research<br>Species Accounts Editor |
| Emily Cohen | Bureau of Land Management | Ecologist<br>Writer-Editor |
| Jean P. Francillette, Esq. | Applied Resource Solutions | Recreation and Motorized Access |
| Dr. Lawrence LaPre | Bureau of Land Management | Biologist<br>All species other than DT, MGS |
| Edward LaRue | Bureau of Land Management | Biologist<br>Desert Tortoise, Mohave Ground Squirrel |
| Lester V. Maddox | Applied Resource Solutions | Recreation and Motorized Access |
| Vicky Miles | Applied Resource Solutions | Recreation and Motorized Access |
| Alozo Pedrin | Principal, Alfred Gobar Associates | Lead Economist<br>Socio-Economic Analyses and Appendix |
| Valery Pilmer | Bureau of Land Management | Land Use Planning |
| Nanette Pratini | University of California, Riverside | Lead GIS Specialist |
| Hubert Switalski | AMEC Earth and Environmental | GIS Specialist |
| Leslie B. Weeks | President, Applied Resource Solutions | Lead Recreation Planner<br>Motorized Vehicle Access |
| Ric Williams | AMEC Earth and Environmental | GIS Specialist |
| San Bernardino County | | |
| Randy Scott | Land Use Services Department | Senior Land Use Planner<br>CEQA Policy Discussions |
| Matthew Whinery | Land Use Services Department | Land Use Planner<br>Transportation, landfills, CEQA scoping |

| Bureau of Land Management | | |
|---|---|---|
| Rob Waiwood | California Desert District Office | Geologist: Mineral resources and maps |
| Ken Schulte | Barstow Field Office | Geologist: Mineral resources and maps |
| Randy Porter | Ridgecrest Field Office | Geologist: Mineral resources |
| Dr. Joan Oxendine | California Desert District Office | Archaeologist: Cultural Resources |
| Amy Lawrence | Barstow Field Office | Archaeologist: Cultural Resources |
| Judyth Reed | Ridgecrest Field Office | Archaeologist: Cultural Resources |
| R. Anthony Chavez | Barstow Field Office | Range Conservationist: Livestock Grazing |
| Kim Allison | Ridgecrest Field Office | Range Conservationist: Livestock Grazing |
| Harold Johnson | Barstow Field Office | Recreation Planner: Access Network |
| Mike Ahrens | Barstow Field Office | Recreation Planner: Access Network |
| Dave Wash | Ridgecrest Field Office | Recreation Planner: Access Network |

In addition to these individuals, a large number of resource professionals made many important contributions to both the EIR/S and the West Mojave Plan. These contributions included (1) Supergroup participation in the development of the proposed action and alternatives; (2) Comments submitted by many dozens of agency and jurisdiction staff following informal review of preliminary versions of the analysis presented in this EIR/S; (3) biological and recreation field survey crews; and (4) Preparation of scientific background reports for the West Mojave team, including species accounts and analyses of field data.

Authors of species accounts (text and maps) and other papers prepared specifically for the West Mojave planning effort are listed in Table 5-2 below. Copies of the species accounts may be found on the CD Rom attached to this document.

**Table 5-2**
**West Mojave Species Account Authors**

| AUTHOR | AFFILIATION | DOCUMENT PREPARED |
|---|---|---|
| Kent Beamon, Species Account Coordinator | Natural History Museum of Los Angeles County | Mojave fringe-toed lizard, Panamint alligator lizard, San Diego horned lizard |
| Plant Species Accounts | | |
| Andrew Sanders (Subteam Leader) | University of California Riverside | Alkali mariposa lily, Crucifixion thorn, Cushenbury buckwheat, Cushenbury oxytheca, Kern buckwheat, Little San Bernardino Mountains gilia, Mojave tarplant, Parish's alkali grass, Parish's daisy, Piute Mountain jewelflower, Red Rock poppy, Red Rock tarplant, Robison's monardella, Safebrush loeflingia, Sand linanthus, Small-flowered androstephium, Triple-ribbed milk vetch |
| Dr. James M. Andre | University of California, Riverside | Barstow Woolly Sunflower |
| Mark Bagley | Independent Consultant | Desert cymopterus, Lane Mountain milk vetch |
| Darin Banks | Rancho Santa Anna Botanical Garden | DeDecker's clover, Muir's raillardella |
| Mark Elvin | Independent Consultant | Ertter's milk vetch, Hall's daisy, Sweet-smelling monardella |
| Julie Greene | Independent Consultant | Alkali mariposa lily, Parish's alkali grass, Piute Mountain jewelflower, Sagebrush loeflingia |
| Pam MacKay | Victor Valley College | Cushenbury milkvetch, Mojave monkeyflower, Short-joint beavertail cactus, White-margined |

| | | |
|---|---|---|
| | | beardtongue |
| Barbara Pitzer, Esq. | University of California, Riverside | Barstow woolly sunflower, Red Rock poppy, Spanish needle onion |
| Scott White | Scott White Biological Consulting | Charlotte's phacelia, Inyo hulsea, Nine-mile Canyon phacelia, Owens Peak lomatium, Parish's phacelia |
| Bird Species Accounts | | |
| Steve Meyers (Subteam Leader) | Tierra Madre Consultants | Brown-crested flycatcher, Summer tanager, Yellow-breasted chat, Yellow warbler |
| Kurt Campbell | Campbell BioConsulting | Burrowing owl, Loggerhead shrike, Long-eared owl, Tricolored blackbird |
| Dr. A. Sidney England | University of California, Davis | Bendire's thrasher, Swainson's hawk |
| Kimball Garrett | Natural History Museum of Los Angeles County | Double-crested cormorant, Gray vireo, Hepatic tanager, Northern harrier, Short-eared owl, Snowy plover, Vaux's swift, Virginia's warbler |
| Paul Grinrod | Hawk Watch International | Cooper's hawk, ferruginous hawk |
| Dr. Lawrence LaPre | Tierra Madre Consultants | Inyo California towhee |
| Steve Laymon | Kern River Research Center | Yellow-billed cuckoo |
| Chet McGaugh | Tierra Madre Consultants | American white pelican, Bank swallow, Long-billed curlew, Mountain plover |
| Kathy Molina | Natural History Museum of Los Angeles County | Double-crested cormorant, Gray vireo, Hepatic tanager, Northern harrier, Short-eared owl, Snowy plover, Vaux's swift, Virginia's warbler |
| Dr. Michael Patten | University of California, Riverside | Least Bell's vireo, Vermillion flycatcher, Yuma clapper rail |
| Brian Prescott | Independent Consultant | Le Conte's thrasher |
| Philip Unitt | San Diego Natural History Museum | Southwestern willow flycatcher |
| Mammal Species Accounts | | |
| Dr. Pat Berry-Brown | Brown-Berry Biological Consulting | Bats |
| David Laabs | Biosearch Wildlife Surveys | Argus Mountains kangaroo rat, Mohave ground squirrel, Mojave River vole, Tehachapi pocket mouse |
| Brian James Walton | University of California, Santa Cruz | Cooper's hawk |
| John Wehausen | White Mountain Research Station | Nelson's bighorn sheep |
| Reptile, Fish and Amphibian Species Accounts | | |
| Dr. William Boarman | U.S. Geological Survey, Biological Resources Division | Desert Tortoise |
| Dr. Bradford Hollingsworth | Loma Linda University | Mojave fringe-toed lizard, San Diego horned lizard |
| Dr. Jeffry Lovich | U.S. Geological Survey, Biological Resources Division | Mohave tui chub, Western pond turtle |
| Clark Mahrdt | San Diego Natural History Museum | Panamint alligator lizard |
| Other Documents | | |
| Dr. Anthony J. Krzysik | University of Arizona, Prescott | Statistical Analysis of BLM Desert Tortoise Surveys |

# 5.7 ACCRONYMS AND GLOSSARY

## ACRONYMS

| | |
|---|---|
| 10a Permit | Federal incidental take permit for a FESA-listed species |
| 2081 Permit | State incidental take permit for a CESA-listed species |
| ACEC | Area of Critical Environmental Concern |
| AGD | Allowable Ground Disturbance |
| ARB | Air Resources Board (California) |
| AUM | Animal Unit Month |
| BA | Biological Assessment |
| BMP | Best Management Practices |
| BLM | Bureau of Land Management |
| BO | Federal Biological Opinion |
| BTA | Biological Transition Area |
| CAAQS | California Ambient Air Quality Standards |
| CALTRANS | California Department of Transportation |
| CDCA | California Desert Conservation Area |
| CDFG | California Department of Fish and Game |
| CDPR | California Department of Parks and Recreation |
| CEQA | California Environmental Quality Act |
| CESA | California Endangered Species Act |
| CHIEFS | CDFG Cumulative Human Impact Evaluation Forms |
| CHMS | Carbonate Habitat Management Strategy |
| CMS | Current Management Situation |
| CNPS | California Native Plant Society |
| DEIR/S | Draft Environmental Impact Report and Statement Statement |
| DOD | Department of Defense |
| DTNA | Desert Tortoise Research Natural Area |
| DWMA | Desert Wildlife Management Areas |
| EA | Environmental Assessment |
| EAFB | Edwards Air Force Base |
| EIR | Environmental Impact Report |
| EIS | Environmental Impact Statement |
| El Paso CAPA | El Paso Collaborative Access Planning Area |
| EPA | Environmental Protection Agency |
| ER | California Department of Fish and Game Ecological Reserve |
| ERA | Inyo County Environmental Resource Areas |
| ESA | Endangered Species Act |
| FESA | Federal Endangered Species Act |
| FHWA? | Federal Highway Administration |
| FLPMA | Federal Land Policy and Management Act |
| FONSI | Finding of No Significant Impact |

| | |
|---|---|
| FWS | United States Fish and Wildlife Service |
| HCA | Habitat Conservation Area |
| HCP | Habitat Conservation Plan |
| JTNP | Joshua Tree National Park |
| IA | Implementing Agreement |
| INRMP | Integrated Natural Resource Management Plan |
| ITA | Incidental Take Area |
| KGRA | Known Geothermal Resource Area |
| LTA | Land Tenure Adjustment |
| MDAQMD | Mojave Desert Air Quality Management District |
| MGS | Mohave Ground Squirrel |
| MGS CA | Mohave Ground Squirrel Conservation Area |
| MOU | Memorandum of Understanding |
| MAZ | Motorized Access Zones |
| MUC | Multiple Use Class |
| NAAQS | National Ambient Air Quality Standards |
| NAWS | China Lake Naval Air Weapons Station |
| NDDB | California Natural Diversity Data Base |
| NEPA | National Environmental Policy Act |
| NGO | Non Governmental Organization |
| NPS | National Park Service |
| NWSRS | National Wild Scenic River System |
| OHV | Off-Highway Vehicle |
| PFC | Proper Functioning Condition |
| RACM | Reasonable Available Control Measures |
| RNA | Research Natural Area |
| ROD | Record of Decision |
| SEA | Los Angeles County Significant Ecological Area |
| SDEIS | Supplemental Draft Environmental Impact Statement |
| SIP | State Implementation Plan (Air Quality) |
| SMARA | Surface Mining and Reclamation Act |
| SRA | Special Review Area |
| URTD | Upper Respiratory Tract Disease |
| USFS | U.S. Forest Service |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| WMP | West Mojave Plan |
| WMPA | West Mojave Planning Area |
| WSA | Wilderness Study Area |

# GLOSSARY

## 5.7.1 West Mojave Planning Terms *(Terms created for the West Mojave Plan)*

**Allowable Ground Disturbance (AGD):** This is a land development threshold (the current proposal for tortoise DWMAs is 1% of the total surface area of those DWMAs, that is, about 15,000 acres). So long as new ground disturbance does not exceed this threshold, project applicants may utilize the streamlined permitting procedures established by the West Mojave Plan may be utilized by project applicants. The threshold would apply throughout the 30-year term of the West Mojave Plan. Once the threshold is reached, the streamlined procedures will no longer be applicable, and all subsequent projects will have to obtain incidental take permits on a case-by-case basis from the United States Fish and Wildlife Service (FWS) and the California Department of Fish and Game (CDFG). The AGD would be calculated and tracked separately for each jurisdiction.

**Biological Transition Areas (BTAs):** BTAs would be established to ensure that projects sited just outside of a tortoise DWMA would not degrade the DWMA's biological integrity or conflict with it's conservation goals. Characteristics of BTAs would include the following:

* BTAs would be located adjacent to tortoise DWMAs, in the form of a band of land one to two miles wide.
* Special project review criteria would be applied during case-by-case reviews of new ground disturbing activities. This would include a review by the West Mojave Implementation Team. The review would be intended to lessen the indirect impacts of large-scale agriculture and mining projects; industrial, residential and commercial development; landfills; and public utilities.
* Take avoidance measures could be applied.
* Proactive programs to protect the adjacent Tortoise DWMA (such as fencing) could be pursued where appropriate.
* BTAs could be established by local governments through ordinances, codes, or included in permitting processes adopted by the jurisdiction.

A final decision regarding the location of BTAs should take into account the conservation strategies and management areas being developed for the Mohave ground squirrel and other species. In addition, the BTA concept could be applied to protect the integrity of other conservation areas (e.g. Mohave ground squirrel BTAs).

**Continuous Accounting:** The process to be used to determine the AGD currently available to each jurisdiction and agency. Acreage of new ground disturbance would be tracked independently for each jurisdiction. Baseline acreage would be set as of time of plan adoption. AGD accounts would be adjusted to reflect land disturbance caused by new projects, and transfers of land from the jurisdiction of one agency or government to another.

**Current Management Situation Document:** A 1998 publication of the West Mojave planning team that summarizes the existing laws, regulations, ordinances and land use plan

provisions of each participating local government, state and federal agency that apply to each of approximately 100 special status plants and animals being addressed by the planning process.

**Evaluation Report:** Publications of the West Mojave planning team presenting conservation strategies for special status plants and animals that, if adopted, could support the issuance of programmatic incidental take permits by FWS and CDFG. The reports were prepared by planning team, CDFG and FWS biologists, in consultation with other recognized experts. A September 1999 Evaluation report addressed the Desert Tortoise, reptiles, small mammals, fish and birds. A September 2000 Evaluation Report addressed the Mohave Ground Squirrel. An Evaluation Report addressing plants was released in Fall 2001.

**Exclusion Zones:** Lands within the planning area where no desert tortoise pre-construction surveys would be required as a condition of project approval (either clearance surveys, or presence-absence surveys). These encompass all lands outside of Tortoise DWMAs where no significant tortoise populations are expected to occur.

**Habitat Conservation Area (HCA):** Management areas established by the West Mojave Plan would be referred to, collectively, as the West Mojave Habitat Conservation Area, or HCA. Subdivisions of the HCA would be established for the protection of a particular species. These component parts would bear the name of the species being protected, that is, the Species X Conservation Area (e.g. the Mohave Ground Squirrel Conservation Area). Component parts may also bear geographic names, such as the Pisgah Crater Conservation Area. The desert tortoise's component part of the HCA would be known as the Tortoise DWMA, a departure in terminology but one that would be consistent with the terminology that has been adopted by other regional planning efforts throughout the listed range of the tortoise.

**Habitat Credit Component:** A tool for increasing a jurisdiction's AGD, or for satisfying a portion of the land compensation required of a project applicant. Credits could be earned by restoring or reclaiming land in a manner that meets criteria set by the West Mojave Plan. The intent is to provide an incentive to restore degraded habitat.

Habitat Rehabilitation Credits (HRCs): Credits awarded to a person or entity that successfully rehabilitates degraded habitat of covered species. The West Mojave Implementation Team would identify degraded habitat suitable for rehabilitation. Rehabilitation sites would be located within the Habitat Conservation Area.

**Implementation Team:** A permanent team composed of CDFG, FWS and other designated staff who would oversee the day to day implementation of the West Mojave Plan, and who would provide regulatory expertise and plan interpretation to assist local governments, agencies and project applicants.

**Land Disturbance:** Clearing, excavating, grading or other manipulation of the terrain.

**Land Disturbing Activity:** Any activity that results in the clearing, excavating or other manipulation of the terrain.

**Managed Use Area:** An intermediate management zone suggested as part of a three-tiered tortoise management concept by the September 1999 Evaluation Report, but later rejected by both Task Group 1 and the Supergroup.

**Management Prescription:** Discrete component of the West Mojave Plan's habitat conservation strategy. A prescription could include *take avoidance* measures intended to minimize and mitigate the impacts of a new development, as well as a proactive management program to be undertaken by land management agency (for example, to control raven populations).

**Mohave Ground Squirrel Conservation Area (MGS Conservation Area):** A sub-component of the Habitat Conservation Area. It would function to protect habitat and conserve the MGS and other special-status species occurring in that area. The Evaluation Report suggests that this area be designated by the Bureau of Land Management (BLM) as an Area of Critical Environmental Concern (ACEC) and that the public lands within it be classified as BLM Multiple Use Class L (limited).

**Special Review Areas (SRAs):** SRAs include areas that, because of urbanization, geography or preponderance of private lands, are not suitable for long-term conservation, but still have biological values. Two SRAs are proposed for the desert tortoise, including the Brisbane Valley (located between Interstate 15 and National Trails Highway, just north of Victorville) and Copper Mountain Mesa (located north of Highway 62 between Yucca Valley and Twentynine Palms). One SRA is proposed for the Little San Bernardino Mountains gilia, just north of Joshua Tree National Park. Within these regions, as for BTAs, a heightened level of environmental review would be required for new projects, and take avoidance measures applied.

**Steering Committee:** A committee established by the West Mojave Supergroup to coordinate the work of the Task Groups and resolve deadlocks.

**Subregion (Vehicle Access):** Twenty-one geographic subdivisions of public lands within the West Mojave planning area. These subregions were established for purposes of organizing the development of a network of motorized vehicle access routes on public lands.

**Supergroup:** The Supergroup is composed of representatives of federal and state agencies, local jurisdictions, and representatives of other governmental and non-governmental organizations with a stake in the future of the western Mojave Desert, as well as interested members of the public. The purpose of the Supergroup is to participate in the preparation of the plan to ensure it is fair, balanced and that it successfully meets the goals and requirements set by applicable statutes, ordinances and regulations.

**Task Group:** A committee assigned by the Supergroup to discuss components of the West Mojave Plan's management strategy. In December 1999, the Supergroup established four Task Groups: Conservation Strategy (Task Group 1), Motorized Vehicle Access (Task Group 2), Regulatory Issues (Task Group 3), and Implementation (Task Group 4).

**Task Group Subcommittee:** Members of a task group assigned by the task group to discuss a discrete component of the West Mojave conservation strategy. For example, Task Group 1 subcommittees have included those dealing with recreation, headstarting, and fencing issues.

**Tortoise Desert Wildlife Management Areas (Tortoise DWMAs):** These conservation areas are designed to encompass essential tortoise habitats (particularly critical habitat) and be of sufficient size to ensure the recovery of the tortoise and conservation of other rare, unlisted species so as to prevent future listing.

**Motorized Vehicle Access Network:** A general term referring, collectively, to routes of travel (roads, ways, trails and washes) on BLM-administered public lands designated by that agency as either open for motor vehicle use, or open in a limited matter (e.g. subject to restrictions based upon vehicle numbers or type, time or season of use, permitted or licensed use, or subject to speed limits).

**West Mojave Web Page:** www.ca.blm.gov/cdd/wemo.html

## 5.7.2 Agency Terminology

**Adaptive Management:** Adaptive management is an integrated method for addressing uncertainty in natural resource management. It also refers to a structured process for learning by doing. Therefore, we are defining adaptive management broadly as a method for examining alternative strategies for meeting measurable biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what is learned. ... An adaptive management strategy should (1) identify the uncertainty and the questions that need to be addressed to resolve the uncertainty; (2) develop alternative strategies and determine which experimental strategies to implement; (3) integrate a monitoring program that is able to detect the necessary information for strategy evaluation; and (4) incorporate feedback loops that link implementation and monitoring to a decision-making process (which may be similar to a dispute-resolution process) that result in appropriate changes in management. (From the *Final Addendum to the [USFWS] Handbook for Habitat Conservation Planning and Incidental Take Permitting Process* (the five-point policy guidance).)

**Area of Critical Environmental Concern:** A BLM land use designation. Areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. The identification of a potential ACEC shall not, of itself, change or prevent change of the management or use of public lands. ACECs can be located within any BLM multiple use class.

**Assurances (No Surprises):** If a conservation strategy is adopted for an unlisted plant or animal through a habitat conservation plan, and an "assurance" is granted by FWS and/or CDFG in an incidental take permit, then in the event of a changed circumstance (such as the listing of the species during the term of the permit), no additional conservation and mitigation measures

beyond those provided in the plan will be required without the consent of the permittee. In the event of an unforeseen circumstance (one that could not reasonably have been anticipated by plan developers), no commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the level agreed upon in the permit can be required. Assurances cannot be provided to federal agencies.

**Authorized Take:** This is the identified level of incidental take that is authorized by an incidental take permit or a biological opinion. Authorized take is expressed in numbers of individual animals or acres of habitat.

**Biological Opinion:** The Federal Endangered Species Act (FESA) requires federal agencies to consult with the FWS to ensure that the actions they authorize, fund, or carry out will not jeopardize listed species (see below, Section 7 definition). Where the FWS determines the proposed action will jeopardize the species, it must issue a biological opinion offering -reasonable and prudent alternatives* identifying measures that, if adopted, could avoid jeopardy to the listed species.

**alifornia Desert Conservation Area (CDCA):** A region encompassing BLM-administered public lands within the Mojave and Colorado deserts of southern California. Congress designated the California Desert as a Conservation Area in 1976. In making that designation (in the Federal Land Policy and Management Act), Congress made the following findings:

> (1) the California desert contains historical, scenic, archaeological, environmental, biological, cultural, scientific, educational, recreational, and economic resources that are uniquely located adjacent to an area of large population;
> (2) the California desert environment is a total ecosystem that is extremely fragile, easily scarred, and slowly healed;
> (3) the California desert environment and its resources, including certain rare and endangered species of wildlife, plants and fishes, and numerous archaeological and historic sites, are seriously threatened by air pollution, inadequate Federal management authority, and pressures of increased use, particularly recreational use, which are certain to intensify because of the rapidly growing population of southern California.... [43 USC 1781(a).]

The purpose of the designation was "to provide for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple use and sustained yield, and the maintenance of environmental quality." (43 USC 1781(b).)

**California Desert Conservation Area Plan (CDCA Plan):** In 1976, Congress found that:

> (4) the use of all California desert resources can and should be provided for in a multiple use and sustained yield management plan to conserve these resources for future generations, and to provide present and future use and enjoyment, particularly outdoor recreation uses, including the use, where appropriate, of off-road recreational vehicles.... [43 USC 1781(a).]

Congress directed the Secretary of the Interior to "prepare and implement a comprehensive, long-range plan for management, use, development, and protection of the public lands within the

California Desert Conservation Area." (43 USC ?1781(d).) The CDCA Plan was completed by the BLM and signed by the Secretary of the Interior in 1980. The CDCA Plan, as amended since its original adoption, serves as the BLM's general land use plan for public lands in this region, including all public lands located within the western Mojave Desert.

**Category I, II and III Tortoise Habitat):** The CDCA Plan delineates public land tortoise habitat into three management categories (I, II, III). These categories superceded the 1980 desert tortoise crucial habitat designations. Category I, II and III can be applied to any BLM multiple use class. The goals of the categories follow:

> Category I Goal: Maintain stable, viable populations and increase populations where possible.
> Category II Goal: Maintain stable, viable populations.
> Category III Goal: Limit declines to the extent possible using mitigation measures. [CDCA Plan as amended, page 31.]

**Clearance Survey (Desert Tortoise):** A desert tortoise removal survey, conducted on a property just prior to the beginning of construction. Transects spaced thirty feet across are walked across the property, and tortoises removed. The survey is repeated until one survey is completed during which no new live tortoises or burrows are discovered.

**Compensation:** A type of project mitigation, whereby a project applicant is required to mitigate an impact by replacing and/or providing substitute resources or environments. A commonly used method is to require the proponent of a project that will disturb or destroy a portion of a species' habitat to purchase a set amount of undisturbed habitat that is currently in private ownership and donate the land to a public agency for management in perpetuity as a conservation area.

* **Example:** A developer's project will destroy 10 acres of tortoise habitat. The developer is required to purchase undisturbed tortoise habitat in private ownership at, for example, a 5:1 ratio (that is, 50 acres) and donate the land to a public agency for conservation management. The theory is that providing a long-term assurance of conservation management for the 50 acres will be enough to offset the permanent loss of the 10 acres.

**Conservation Bank:** In California, mitigation banking (focused on wetlands) has evolved into conservation banking (applicable to wildlife and plant habitat in general). Mitigation banking often includes the creation of habitat (i.e. wetlands) while conservation banking generally preserves existing habitat. "A conservation bank is privately or publicly owned land managed for its natural resource values. For example, in order to satisfy the legal requirement for mitigation of environmental impacts from a development, a landowner can buy credits from a conservation bank, or in the case of wetlands, a mitigation bank. Conservation banking legally links the owner of the bank and resource agencies, such as the Department of Fish and Game or the U.S. Fish and Wildlife Service." (From the California Environmental Resources Evaluation System (CERES) web page.)

**Conservation Easements:** A legal agreement to help preserve open space. Conservation easements are legally binding agreements negotiated between a landowner and the holding agent (land trust). The landowner gives up certain rights, usually development rights. In

return, the landowner may be able to take an income tax deduction if the easement is permanent and donated. While there are limits to charitable deductions, they can be spread out over several years. Conservation easements can (but not always) also reduce the amount of the taxable estate, thus reducing property and inheritance taxes. (From the San Luis Obispo Land Trust web page.)

**Conservation Strategy:** The program to be developed by the West Mojave Plan to conserve sensitive animal and plant species. This program may address each species separately and; in addition, describe the collective effect of all species programs, taken together. The program will identify measurable biological goals for each species. Specific measures to be taken during implementation must be clearly defined, including measures to minimize and mitigate impacts, and proactive management programs. Success criteria would be clearly defined, and a monitoring and adaptive management program laid out.

**Covered Species:** Species included on an incidental take permit for which a habitat conservation plan has been prepared that satisfies the incidental take permit issuance criteria of FESA and/or the California Endangered Species Act (CESA) for that species. The term encompasses unlisted species that have been adequately addressed in a habitat conservation plan (HCP) as though they were listed, and are therefore included on the permit or, alternatively, for which assurances are provided to the permittee that such species will be added to the permit if listed under certain circumstances. Covered species are also subject to the assurances of the No Surprises policy.

**Critical Habitat:** FESA defines this as the specific areas within the geographical area occupied by a listed species on which are found those physical or biological features (1) essential to the conservation of the species and (II) which may require special management considerations or protection; and, specific areas outside the geographical area occupied by a listed species upon a determination by FWS that such areas are essential for the conservation of the species.

**Crucial Habitat:** A land use designation of the BLM's CDCA plan, applicable to public lands only. Crucial habitat can be established within any BLM multiple use class. In 1980, the CDCA Plan identified, among 64 ? planned management areas for fish and wildlife? , area W-21, the 512,000 acre Western Mojave Crucial Habitat (Tortoise). This designation was superseded in 1993 by the delineation of public lands as Category I, II or III tortoise habitat. The CDCA Plan also identified approximately 320,000 acres of Mohave ground squirrel crucial habitat within the western Mojave Desert.

**Delist:** To remove from the list of endangered and threatened species because the species no longer meets any of the listing criteria provided in FESA and/or CESA and under which the species was originally listed (i.e., because the species has become extinct or is recovered).

**Discretionary Permit:** A permit issued by a local jurisdiction that requires the exercise of judgement or deliberation by the decision making authority prior to issuance.

**Ecological Reserve:** A CDFG land use designation. It is the policy of the State of California, "to protect threatened or endangered native plants, wildlife or aquatic or large heterogeneous natural marine gene pools for the future use of mankind through the establishment

of ecological reserves." (Cal. Fish and Game Code 2701(c) at 1580.) The California Fish and Game Commission (Commission) may acquire or control and administer lands for the state. Where appropriate, the Commission may designate these lands as ecological preserves and adopt regulations for the occupation, utilization, operation, protection, enhancement and maintenance of these areas.

**Endangered Species:** A species that is in danger of extinction throughout all or a significant portion of its range.

**General Plan (City & County):** The counties, cities and towns that are preparing the West Mojave Plan have land use planning and zoning authority over private property within their jurisdictions. State law requires that each county and city adopt and maintain a general plan as a guide to future development. The general plan includes a conservation element that sets policy for management of natural resources including biological values.

**Habitat Conservation Plan:** A planning document that is a mandatory component of an incidental take permit application. The West Mojave Plan is a habitat conservation plan.

**Habitat Management Area (HMA):** The BLM's CDCA Plan delineated habitat management areas for wildlife habitats or species requiring intensive, active management programs. HMAs can be located within any BLM multiple use class. Habitat Management Plans are developed for these areas, although their preparation is of lower priority than ACEC plans. (CDCA Plan as amended, page 29.)

**Incidental Take:** Take that is incidental to, but not the purpose of, the carrying out of an otherwise lawful activity, or take that is inadvertent. Construction of transmission lines and installation of pipelines in occupied desert tortoise habitat are examples of ? otherwise lawful activities? .

**Incidental Take Permit:** This term refers to two separate permits, one issued by FWS and the other by CDFG. The FWS incidental take permit exempts a permittee from the take prohibition of section 9 of FESA. Issued pursuant to section 10(a)(1)(B) of FESA, it is also known as a "Section 10" permit. The CDFG incidental take permit exempts a permittee from the take prohibition of section 2080 of CESA. Issued pursuant to section 2081 of CESA, it is also known as a "Section 2081" permit.

**Joint Powers Agreement (JPA):** A joint powers agreement (California Government Code section 6500 et seq.) allows two or more government agencies to combine forces by jointly exercising their powers with respect to a specific purpose or set of objectives. It does not create new powers, but instead provides a vehicle for the cooperative use of existing governmental powers. Agencies that may enter into this type of agreement include the federal and state governments, cities, counties, county school boards, public districts, and public agencies of other states. A joint powers authority can enter into contracts, employ people, acquire, construct and maintain buildings, improvements and public works, and issue revenue bonds. The member agencies can also agree to exchange services.

**Land Tenure Adjustment (LTA) Program:** Numerous land exchanges have been taking place within the Western Mojave Land Tenure Adjustment Area, pursuant to a joint BLM and Air Force project initiated in the late 1980s. These exchanges, facilitated by Air Force funding, are intended to preclude land uses not compatible with the training/testing mission of Edwards AFB, to encourage private land development in appropriate locations, and to provide for more efficient management of public lands. The acquisition of land through LTA project exchanges does not, in and of itself, create a commitment for long-term conservation of a species.

**Measurable Biological Goals and Objectives:** Biological goals are the broad guiding principles for the operating conservation program of the HCP. They are the rationale behind the minimization and mitigation strategies. If the operating conservation program is relatively complex, the biological goal is divided into manageable and measurable objectives. Biological objectives are the different components needed to achieve the biological goal such as preserving sufficient habitat, managing the habitat to meet certain criteria, or ensuring the persistence of a specific minimum number of individuals. The biological goals and objectives may be either habitat or species based. (From the *Final Addendum to the [USFWS] Handbook for Habitat Conservation Planning and Incidental Take Permitting Process* (the five-point policy guidance).)

**Minimize Take:** Measures that will be implemented on-site to minimize impacts to the desert tortoise and other special-status species (e.g., fencing, biological monitors, reduced speed limit, education programs, etc.).

**Ministerial Permit (City & County):** A permit issued by a local jurisdiction that requires the application of statutes, ordinances or regulations to the facts as prescribed, and involves little or no personal judgment by the decision making authority prior to issuance.

**Mitigate Take:** Measures that will be implemented off-site to compensate for impacts to a special-status species (e.g. compensatory land purchase).

**Mitigation Bank:** See Conservation Bank.

**Monitoring:** Monitoring is a mandatory element of all HCPs. Monitoring should provide the information necessary to assess compliance and project impacts, and verify progress toward the biological goals and objectives. Monitoring also provides the scientific data necessary to evaluate the success of the HCP's operating program. HCP monitoring is divided into two types. Compliance monitoring is verifying that the permittee is carrying out the terms of the HCP, permit and the Implementing Agreement. Effects and effectiveness monitoring evaluates the effects of the permitted action and determines whether the effectiveness of the operating conservation program of the HCP are consistent with the assumptions and predictions made when the HCP was developed and approved; in other words, is the HCP achieving the biological goals and objectives. (From the *Final Addendum to the [FWS] Handbook for Habitat Conservation Planning and Incidental Take Permitting Process* (the five-point policy guidance).)

**Multiple Use Class:** A BLM land use planning designation. On the basis of uses and resource sensitivity, the BLM's CDCA Plan geographically designated nearly all public lands within the CDCA into four multiple-use classes (MUC). The CDCA Plan established management guidelines for each multiple use class. The purposes of each class follow:

> **Class C** (Controlled Use) -- Wilderness.
> **Class L** (Limited Use) -- "... protects sensitive, natural, scenic, ecological, and cultural resource values ... managed to provide for generally lower-intensity, carefully controlled multiple use for resources, while ensuring that sensitive values are not significantly diminished."
> **Class M** (Moderate Use) -- "... a controlled balance between higher intensity use and protection of public lands ... management is also designed to conserve desert resources and to mitigate damage to those resources which permitted uses may cause."
> **Class I** (Intensive Use) -- "... provide for concentrated use of lands and resources to meet human needs. Reasonable protection will be provided for sensitive natural and cultural values. Mitigation of impacts on resources and rehabilitation of impacted areas will occur insofar as possible." (CDCA Plan as amended, page 13.)

**Open Area:** A land use designation of BLM's CDCA Plan. Within Open Areas, motorized vehicle travel is permitted anywhere in the area if the vehicle is operated responsibly in accordance with regulations and subject to permission of private land owners if applicable. This will apply to (1) those lands in [BLM Multiple Use] Class I specifically designated open for vehicle travel, and (2) certain sand dunes and dry lakebeds. (CDCA Plan as amended, page 76.)

**Presence and Absence Surveys (Desert Tortoise):** A survey conducted early during project planning, usually prior to (or as a part of) the CEQA initial study or NEPA environmental assessment. The survey is governed by procedures established by FWS in 1992, and is conducted in areas below 5000 feet elevation that are within desert tortoise habitat. Specifically, transects spaced thirty feet apart are walked across a property (that is, 100 percent coverage). One pass is conducted. In addition, a ? zone of influence? survey is conducted on undeveloped lands surrounding the property, on transects located the following number of feet from the property: 100, 300, 600, 1200 and 2400.

**Reclamation:** Taking such reasonable measures as will prevent unnecessary or undue degradation of the Federal lands, including reshaping land disturbed by operations to an appropriate contour and, where necessary, revegetating disturbed areas so as to provide a diverse vegetative cover. Reclamation may not be required where the retention of a stable highwall or other mine workings is needed to preserve evidence of mineralization.

**Recovery:** To return the population of a listed species to a level that will ensure its long-term survival and viability.

**Recovery Plan:** Plans developed by FWS that recommend a program to provide for the conservation and survival of listed species. These plans include site-specific management actions necessary to achieve the conservation and survival of the species; objective and measurable criteria for delisting; and time and cost estimates.

**Recovery Unit:** Distinct population segments of a listed species. The desert tortoise, for example, is listed as threatened by the Service within those portions of its range north and west

of the Colorado River. This area is divided into six recovery units. The western Mojave Desert is one of those recovery units. Recovery is judged in the context of each of these units independently.

**Rehabilitation:** The site will be returned to a stable form, not necessarily to a condition that existed prior to surface disturbing operations. Land use alternatives may be considered in post operation development plans, developed through planning. A second use may include a use not consistent with uses existing prior to operation disturbances.

**Research Natural Area:** An area that is established and maintained for the primary purpose of research and education because the land has one or more of the following characteristics: (1) A typical representation of a common plant or animal association; (2) An unusual plant or animal association; (3) A threatened or endangered plant or animal species; (4) A typical representation of common geologic, soil, or water features; or (5) Outstanding or unusual geologic, soil or water features. (43 CFR 8223.0-5.)

**Restoration:** Return the disturbed area to a condition that existed prior to surface disturbing activities. Elements include revegetation or the ability to revegetate with species native to the area. May include placement of vegetation in the same locations that existed prior to conduct of operations.

**Section 7 (FESA):** The subdivision of FESA that describes the responsibilities of Federal agencies in conserving threatened and endangered species. It requires that any action authorized, funded, or carried out by the agency should not be likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of the species? habitat. It includes a requirement that agencies consult with FWS if an action will likely affect a listed species that may be present in the area affected by the project. It requires FWS to issue a biological opinion stating how the action will affect the species or its critical habitat and, if jeopardy or adverse habitat modification is found, it suggests reasonable and prudent alternatives.

**Section 9 (FESA):** The subdivision of FESA that prohibits take of any endangered fish or wildlife species, and that prohibits the removal of listed plants from areas under Federal jurisdiction (or any other areas in knowing violation of a state law, such as CESA).

**Section 10 (FESA):** The subdivision of FESA that provides an exception to Section 9's take and removal prohibitions. Section 10 provides private land owners, with no federal agency involvement, to develop a given project where a federally threatened or endangered species may be incidentally ? taken? as a result of the project. In this case, the private landowner or developer is required to obtain an incidental take permit from FWS after preparing a Habitat Conservation Plan. The permit may be issued only if the following permit issuance criteria are met:

> (i) The taking will be incidental;
> (ii) The applicant will, to the *maximum extent practicable*, minimize and mitigate the impacts of such taking;
> (iii) The applicant will ensure that *adequate funding* for the plan will be provided;

(iv) The taking will *not appreciably reduce the likelihood of the survival and recovery of the species in the wild*; and,
(v) The measures, if any, required under [1539(a)(2)(A), ? such other measures that the Secretary may require as being necessary or appropriate? ] will be met, and [the Secretary] has received such other assurances as he may require that the plan will be implemented.... [FESA at ?10(a)(2)(B), emphasis added.]

**Section 2081:** The subdivision of CESA that authorizes CDFG to allow, by permit, the take of an endangered, threatened or candidate species. Such a permit may be issued only if the following permit issuance criteria are met:

(1) The take is *incidental to an otherwise lawful activity*.

(2) The impacts of the authorized take shall be *minimized and fully mitigated*. The measures required to meet this obligation shall be *roughly proportional* in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall *maintain the applicant's objectives to the greatest extent practicable*. All required measures shall be capable of successful implementation. For purposes of this section only, impacts of taking include all impacts on the species that result from any act that would cause the proposed taking.
(3) The permit is consistent with any regulations adopted pursuant to Sections 2112 and 2114.
(4) The applicant shall ensure *adequate funding* to implement the measures required by paragraph (2), and for monitoring compliance with, and effectiveness of, those measures. [CESA. At 2081(b), emphasis added.]

**Special Areas (SA):** A land use designation applied by BLM's CDCA Plan. Special Areas are a tool to highlight habitats and species known to be important for special consideration in the environmental assessment process for any kind of project. The multiple-use class guidelines for the class in which the area is located will provide the basic management direction for each Special Area. Where appropriate, activity plans will establish site-specific management directives. The CDCA Plan specifically indicated that other mechanisms (such as management plans) would be used to commit SAs to long-term conservation (CDCA Plan as amended, page 29).

**Significant Ecological Area (SEA):** Los Angeles County zoning overlay, establishing areas where developments are reviewed for compatibility with the goals and purposes of the SEA. Development proposals within designated or potential SEAs must comply with specific design criteria:

* The development is designed to be highly compatible with biotic resources present, including the setting aside of appropriate and sufficient undisturbed areas;
* The development is designed so that wildlife movement corridors (migratory paths) are left in a natural and undisturbed state;
* The development retains sufficient natural vegetative cover and/or open spaces to buffer critical resource areas from the proposed use;
* Where necessary, fences or walls are provided to buffer important habitat areas from development;
* Roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths; and,

* Clustering of structures is utilized where appropriate to assure compatibility with the biotic resources present (From the Antelope Valley Plan.)

**Specific Plan:** A specific plan is a tool, authorized by state law, which provides for the systematic implementation of a city or county general plan. A specific plan establishes a link between implementing policies of the general plan and the individual development proposals in a defined area. A specific plan may be as general as setting forth broad policy concepts, or as detailed as providing direction to every facet of development from the type, location and intensity of uses to the design and capacity of infrastructure; from the resources used to finance public improvements to the design guidelines of a subdivision.

**Special Status Species:** These include species:

* Listed as threatened or endangered (state and federal)
* Proposed for listing;
* Candidates for listing by the state and/or federal government;
* California species of concern;
* Designated as sensitive by the BLM; and,
* Plants identified by the California Native Plant Society as rare, threatened, endangered, or of limited distribution in California.

**Standards and Guidelines:** A *Standard* is an expression of the level of physical and biological condition or degree of function required for healthy, sustainable rangelands. *Guidelines* for grazing management are the types of grazing management activities and practices determined to be appropriate to ensure that the standards can be met or significant progress can be made toward meeting standards.

**Take (FESA):** Harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Harass is further defined in federal regulations as an intentional or negligent actor omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns that include, but are not limited to, breeding, feeding, or sheltering. Harm is further defined as an act, that may include significant habitat modification or degradation, where it actually kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering.

**Take (CESA):** Hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill. (Cal. Fish and Game Code Section 86.)

**Threatened Species:** A species is likely to become endangered within the foreseeable future. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened.

**Utility Corridor:** A BLM planning term. The CDCA Plan designated a regional network of sixteen *utility planning corridors* (later increased to nineteen by plan amendments). Corridors are from two to five miles wide, and are several to hundreds of miles in length. They

apply to electrical transmission towers and cables of 161kV and above; pipelines with diameters greater than 12 inches, coaxial cables for interstate communications, and major aqueducts or canals for interbasin transfers of water. Their purpose is to guide detailed planning and siting of utility projects requiring a right of way from the BLM. Location of a project within a corridor does not, without more, confer a right of way or fulfill environmental review requirements; however, projects subject to the corridor requirement are allowed outside of corridors only through an amendment to the CDCA Plan. BLM issues a permit that allows the construction of a new utility in these corridors only after FESA Section 7 consultation with FWS. Local distribution facilities may be located outside of designated corridors. The CDCA Plan also identified several contingent corridors (routes having some potential for use in the future), which could be brought forward into the plan after successfully completing the Plan Amendment process. (CDCA Plan as amended, pages 93-94.)

**Wilderness Area:** A unit of the National Wilderness Preservation System. Wilderness areas are designated by Congressional action. It is a natural preserve with outstanding opportunities for solitude and unconfined primitive experience. Wilderness is a place to enjoy where ecological, geological and other features of scientific, scenic, educational and historical value are protected and their character retained. BLM manages wilderness in accordance with the provisions of the Wilderness Act of 1964 and approved wilderness management plans. These plans generally contain actions that:

> (1) Maintain an enduring system of high-quality wilderness;
> (2) Perpetuate the wilderness resource;
> (3) Provide, to the extent consistent with items 1 and 2, opportunities for public use, enjoyment, and understanding of wilderness, and the unique experiences dependent upon a wilderness setting;
> (4) Maintain plants and animals indigenous to the area;
> (5) Maintain stable watersheds within constraints of the Wilderness Act;
> (6) Consider protection needs for populations of threatened or endangered species and their habitats in management of wilderness;
> (7) Consider accessibility to all segments of the population (including the handicapped, elderly, and underprivileged) in the management of wilderness;
> (8) Consider valid nonconforming resource uses and activities in the management of wilderness so as to have the least possible adverse effect and/or wherever possible a positive effect; and
> (9) Provide access to inholdings of private lands and vehicle access required by many areas because of the lack of water and the harsh environment of the Desert. [CDCA Plan as amended, page 50.]

**Wilderness Study Area (WSA):** Wilderness Study Areas are public lands that Congress has directed remain unimpaired for Wilderness designation until such time as Congress decides whether or not they will become units of the National Wilderness Preservation System. BLM manages its WSAs pursuant to an interim management policy described in the CDCA Plan. Although Congress made a final designation decision with respect to most of the western Mojave Desert? s WSAs in 1994, five WSAs remain, all on BLM lands: Avawatz Mountains, Cady Mountains, Great Falls Basin, Soda Mountains and South Avawatz Mountains.

**Wildlife Management Areas:** The California Fish and Game Commission establishes the CDFG's Wildlife Management Areas for the purpose of propagating, feeding and protecting birds, mammals and fish. These areas include the Camp Cady Wildlife Area; the Fremont Valley, Indian Joe Spring, Indian Wells Valley, King Clone and West Mojave Desert Ecological

Reserves; and the Hinkley Conservation Easement. The Commission may acquire by purchase, or lease and occupy develop, maintain, use and administer land and water or land and water rights suitable for the purpose of wildlife management. The regional managers have the authority to regulate public use of these areas including motor vehicle access, camping, hunting, use of dogs, and pesticide use.

## 5.7.3 Conservation Biology Terms

**Center of Endemism:** Area where several endemic species occur together. These species presumable evolved in this location due to unique geologic, climatic, or biological features of the area, whether now or in the past.

**Endemic:** The entire range of a species is confined to a relatively small area, defined as 50,000 square kilometers or less. This is about the size of the range of the Mojave ground squirrel. Many endemics in the West Mojave occupy much smaller ranges, consisting of only a few thousand acres. These are often termed narrow endemics.

**Habitat:** The location where a particular taxon of plant or animal lives and its surroundings, both living and non-living; the term includes the presence of a group of particular environmental conditions surrounding an organism including air, water, soil, mineral elements, moisture, temperature, and topography.

**Headstarting:** Headstarting is a proactive effort to repopulate areas that in the 1970's supported good tortoise numbers, may still be good habitat, and therefore be good for newly introduced animals The intended function of headstarting is to reintroduce tortoises (often referred to as repatriation) into landscapes that once supported tortoises and are now devoid of them, or nearly so, for one reason or another. Gravid females (those with eggs) are taken from nearby areas, placed into a compound known as a module, allowed to lay eggs, and then placed back in the location from which they were taken. Hatchlings or more mature tortoises are later released (timing is dependent upon method used).

**Hotspot:** Area containing ten or more of the target species.

**Linkage:** Region connecting two or more conservation areas. Linkages may act as dispersal corridors for wide-ranging species, provide habitat for pollinators, or serve to maintain genetic continuity between major populations of a species. Some linkages, particularly large drainages, serve to connect several different habitats over an elevational gradient.

**Trophic Level:** An organism's position on the food pyramid. The lowest trophic levels are termed primary producers and consist of plants that convert soil minerals, water, and air to biomass. Primary producers are eaten by primary consumers, which in turn are eaten by secondary consumers. At the highest trophic level are the larger predators.

# 5.8 LIST OF REFERENCES

Aardahl, J. B. and P. Roush. 1985. Distribution, relative density, habitat preference and seasonal activity levels of the Mohave ground squirrel (*Spermophilus mohavensis*) and antelope ground squirrel (*Ammospermophilus leucurus*) in the Western Mojave Desert, California. Unpublished report prepared on behalf of the Bureau of Land Management. Riverside, CA.

Almquist, C., T. Camm, N. Wetzel, D.A. Benjamin, and M. Horn. Oct. 1993. Economic analysis of the minerals potential of the West Mojave Management Area including the desert tortoise priority habitat, Calif., U.S. Bureau of Mines, Open File Report 32-93, Western Field Operations Center, prepared for the BLM to present information on the economic significance of mineral resources in the West Mojave Management Area, pp. 24, attachments.

Applegate, D. May 1997. Political scene: Geotimes, Vol. 42, No. 5, American Geological Institute.

Avian Power Line Interaction Committee (APLIC), 1996. Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996, Edison Electric Institute/Raptor Research Foundation, Washington, D. C.

Avery, H.W. 1993. Nutritional ecology of the desert tortoise consuming native versus exotic desert plants. Proceedings of the Desert Tortoise Council Symposium, Vol. 1993, Abstract, 3.

Avery, H.W. 1994. Digestive physiology and nutritional ecology of the desert tortoise fed native versus non-native vegetation: Implications for tortoise conservation and land management. Proceedings of the Desert Tortoise Council Symposium, Vol. 1994, Abstract, 143.

Avery, H. W. and K. H. Berry. 1993. Upper respiratory tract disease and high adult death rates in western Mojave tortoise populations, 1989-1990. Proceedings of the Desert Tortoise Council Symposium. Vol. 1987- 1991. Abstract. pp. 281.

Avery, H. W. and A. G. Neibergs. 1997. Effects of cattle grazing on the desert tortoise, *Gopherus agassizii*: Nutritional and behavioral interactions. Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles - An International Conference, pp. 13-20. 1997 by the New York Turtle and Tortoise Society.

Avery, H.W. 1998. Nutritional ecology of the desert tortoise (*Gopherus agassizii*,) in relation to cattle grazing in the Mojave Desert. Ph.D. dissertation, University of California, Los Angeles.

Baird, A.K., D.M. Morton, A.O. Woodford, and K.W. Baird. 1974. Transverse Ranges Province: a unique structural-petrochemical belt across the San Andreas fault system, *in* Geological Society of America Bull., v. 85, pp. 163-174.

Barnes, James J. 2002 The Life of Reilly: The Archaeology of an 1880s Silver Mine in Panamint Valley, California. Masters Thesis, Sonoma State University.

Bartholomew, G.A. and J.W. Hudson. 1961. Aestivation in the Mohave ground squirrel (*Citellus mohavensis*). Bull. Mus. Comp. Zool. 124:193-208.

Bean, Lowell John. 1962-1972. Serrano Field Notes. Cited In The *Handbook of North American Indians, Volume 8: California* edited by Robert F. Heizer. Smithsonian Institute. Washington D.C.

Bean, Lowell J. and Charles R. Smith. 1978. Serrano. In The *Handbook of North American Indians, Volume 8: California* edited by Robert F. Heizer. Smithsonian Institute. Washington D.C.

Bean, Lowell J. and Thomas C. Blackburn. 1976. *Native Californians – A Theoretical Retrospective*. Ballena Press, Socorro, New Mexico.

Beeby, D.J., R.V. Miller, R.L. Hill, and R.E. Grunwald. 1999. Aggregate resources in the Los Angeles metropolitan area, Calif. Div. of Mines and Geology, Miscellaneous Map No. 010.

Bell, D. 1988. A mixture of volunteers: Cooperative efforts to protect the desert tortoise in California. Proceedings of the Desert Tortoise Council Symposium. Vol. 1987-1991. pp. 57-58.

Berry, K.H. 1985. Avian predation of the desert tortoise (*Gopherus agassizii*) in California. U.S. Department of the Interior, Bureau of Land Management. Riverside, CA.

Berry, K.H. 1986. Incidence of gunshot deaths in desert tortoise populations in California. Wildlife Society Bulletin 14: 127-132.

Berry, K. H. 1990, as amended to include 1990, 1991, and 1992 data sets. U.S. Bureau of Land Management, Riverside, California. (Note: This is an incomplete draft report, which was originally mailed January 19, 1990 to the Fish and Wildlife Service, Region 1, Portland, Oregon. The manuscript is being developed and will be a monograph).

Berry, K. H. 1992. Relationships between tortoise population declines, levels of human use, and impacts to habitats. Proceedings of the Desert Tortoise Council Symposium. Vol. 1992. Abstract. pp. 110.

Berry, K. H. 1996a. Draft report. The effects of off-road vehicles on animal populations and habitats: A review of the literature. Unpublished, draft report prepared on behalf of the Bureau of Land Management. Riverside, CA. pp.60.

Berry, K. H. 1996b. Memo from Dr. Kristin Berry to BLM Area Manager, Molly Brady regarding observations on permanent BLM study plots between 1979 and 1996. Riverside, CA.

Berry, K. H. 1997. Demographic consequences of disease in two desert tortoise populations in California, USA. Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles - An International Conference, pp. 91-99.

Berry, K. H. and M. M. Christopher. 2001. Guidelines for the field evaluation of desert tortoise health and disease. J. Wildlife. Disease 37:427-450.

Berry, K.H. and L.L. Nicholson. 1984. The distribution and density of desert tortoise populations in California in the 1970's. *In* Berry, K.H., (ed.). The status of the desert tortoise (Gopherus agassizii) in the United States. U.S. Department of the Interior, Bureau of Land Management. Riverside, California.

Berry, K., M. Weinstein, G. O. Goodlett, A. Woodman, and G. G. Goodlett. 1994. Draft Report. The distribution and abundance of desert tortoises and human uses in 1990 in the Rand Mountains, Fremont Valley, and Spangler Hills (Western Mojave Desert), California. Prepared on behalf of the U.S. Bureau of Land Management, Riverside, CA.

Best, T. L. 1995. *Spermophilus mohavensis*. Mammalian Species 509:1-7.

Bevill, Russell W., Michael S. Kelly, and Lisa Westwood. 2001. Cultural Resources Investigation of Selected Portions of the First and Second Los Angeles Aqueducts, Inyo and Kern Counties, California and Addendum. URS Corporation, Portland, Oregon. On file, Bureau of Land Management, Ridgecrest, CA.

Bezore, S.P., R.H. Chapman, G.W. Chase, L.G Youngs, R.L Hill, R. V. Miller, and D.O. Shumway. 1997. Mineral land classification of a part of southwestern San Bernardino County: the Barstow-Newberry Springs area, California, Calif. Div. of Mines and Geology, open file report 97-16, pp.47, appendices, maps 1:62:500.

Biggins, D. E., B. J. Miller, and T. W. Clark. 1997. Management of an endangered species: The black-footed ferret. Pp. 420-426 *In*: Principles of conservation biology (G. K. Meffe and C. R. Carroll, eds.). 2nd Ed. Sinauer Assoc., Inc. Publ., Sunderland, MA.

Bjurlin, C. D. and J. A. Bissonette. 2001. The impact of predator communities on early life history stage survival of the desert tortoise at the Marine Corps Air Ground Combat Center, Twentynine Palms, California. U. S. Dept. of the Navy Contract N68711-97-LT-70023. UCFWRU Pub. # 00-4: 1-81.

Boarman, W. I. 1992. The raven monitoring program of the Bureau of Land Management: Status as of 1992. Proceedings of the Desert Tortoise Council Symposium. Vol. 1992. pp. 113-116.

Boarman, W. I. 1993. When a native predator becomes a pest: a case study. For: Conservation and resource management (S.K. Majumdar, et al., eds.), pp. 186-201. Pennsylvania Academy of Science. Easton, PA.

Boarman, W. I. and M. Sazaki. 1996. Highway mortality in desert tortoises and small vertebrates: success of barrier fences and culverts. Pages 169 - 173 in Transportation and wildlife: reducing wildlife mortality and improving wildlife passageways across transportation corridors. G. Evink, D. Zeigler, P. Garrett, and J. Berry, editors. U.S. Department of Transportation, Federal Highway Administration, Washington, DC.

Boarman, W. I., M. Sazaki, G. C. Goodlett and T. Goodlett. 1996. Draft report. Effect of highways on vertebrate and desert tortoise populations and a method to reduce highway mortality. Unpublished, draft report. Riverside, CA.

Boarman, W.I. 2002. Threats to desert tortoise populations: A critical review of the literature. Unpublished report prepared for the West Mojave Planning Team, Bureau of Land Management. U.S. Geological Survey, Western Ecological Research Center. San Diego, CA.

Bortugno, E.J., and T.E. Spittler. 1986. Geologic map of California, San Bernardino sheet, Calif. Div. of Mines and Geology, 1:250,000.

Borysenko, M. 1975. Cellular aspects of humoral immune responsiveness in Chelydra. Adv. Exp. Biol. Med. 64:277.

Borysenko, M. and S. Lewis. 1979. The effect of malnutrition on immunocompetence and whole body resistance to infection in *Chelydra serpentina*. Developmental and Comparative Immunology 3:89-100.

Bowen, O.E., Jr. 1954. Geology and mineral deposits of Barstow Quadrangle, San Bernardino County, California, Calif. Div. of Mines and Geology, Bull. 165, pp.208.

Brooks, M.L. 1993. A Comparison of the Plant and Rodent Communities Inside to Those Outside of the Desert Tortoise Natural Area, Kern County, California. Proceedings of The Desert Tortoise Council Symposium. Vol.1993. pp. 4-8.

Brooks, M. 1996. Abundance of birds, lizards, and black-tailed hares inside and outside of the Desert Tortoise Research Natural Area, California. Proceedings of the Desert Tortoise Council Symposium, Vol. 1996, abstract, 39-40).

Brooks, M. 1998. Effects of fire on the desert tortoise (*Gopherus agassizii*). Proceedings of the International Conference on Turtles and Tortoises. pp. 7.

Brooks, M. L. 1999a. Habitat invasibility and dominance by alien annual plants in the western Mojave Desert. Biological Invasions 1:325-337.

Brooks, M. L. 1999b. Alien annual grasses and fire in the Mojave Desert. Madrono 46:13-19.

Brooks, M. L. 2000. Competition between alien annual grasses and native annual plants in the Mojave Desert. American Midland Naturalist 144:92-108.

Brooks, M. L. and J. R. Matchett. 2001. Sampling methods and trapping success trends for the Mohave ground squirrel (Spermophilus mohavensis). Prepared for the California Department of Fish and Game. Las Vegas, CA. 11 pp.

Brown, H.J. 1987. Geologic setting and operations overview, Lucerne Valley limestone mining district, Lucerne Valley, California, proceedings from the 21st Forum on the Geology of Industrial Minerals, Special Paper 4, pp.52.

Brown, M.B., I.M. Schumacher, P.A. Klein, K. Harris, T. Correll, E.R. Jacobson, 1994. *Mycoplasma agassizii* causes upper respiratory tract disease in the desert tortoises. Infection and immunity 62(10): 4580-4586.

Brown, H.J. and L. Monroe. 2000. Geology and mineral deposits in the Baxter – Basin area south of Cave Mountain, San Bernardino County, Calif.: San Bernardino County Museum Quarterly, v. 47, no. 2, pp. 42-46.

Brown, D.E. and R.A. Minnich. 1986. Fire and changes in creosote bush scrub of the western Sonoran desert, California. American Naturalist 116(2): 411-422.

Burge, B.L. 1978. Physical characteristics and patterns of utilization of cover sites by *Gopherus agassizii* in southern Nevada. Proceedings of the 1978 Symposium, Desert Tortoise Council.

Burge, B. L. 1986. Impact of Frontier 500 off-road vehicle race on desert tortoise habitat. Proceedings of the Desert Tortoise Council Symposium. Vol. 1986. pp. 27-38.

Burge, B.L., and W.G. Bradley. 1976. Population density, structure and feeding habits of the desert tortoise, *Gopherus agassizii*, in a low desert study area in southern Nevada. Proceedings of the 1976 Symposium, Desert Tortoise Council.

Bury, R.B., T.C. Esque, L.A. DeFalco and P.A. Medica. 1994. Distribution, habitat use, and protection of the desert tortoise in the eastern Mojave Desert. In R.B. Bury and D.J. Germano, editors. Biology of North American tortoises. National Biological Survey, Fish and Wildlife Research 13.

Bury, R. B. and R. A. Luckenbach. 1977. Censusing desert tortoise populations using a quadrat and grid location system. Proc. 1977 Desert Tortoise Council Symp. 1977: 169-178.

CNPS, 2001. *Inventory of Rare and Endangered Plants of California* (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA. x + 388pp.

California Department of Corrections. 1999. Statewide Electrified Fence Project Habitat Conservation Plan. Submitted to U. S. Fish and Wildlife Service, Sacramento, CA.

California Department of Fish and Game. 1980. At the Crossroads. Sacramento, CA.

California Department of Fish and Game. 1992. Annual report on the status of California State-listed threatened and endangered animals and plants. Sacramento, CA.

Camp, R.J., R.L. Knight, H.A.L. Knight, M.W. Sherman, and J.Y. Kawashima. 1993. Food habits of nesting common ravens in the eastern Mojave desert. Southwest. Natur. 38:163 165.

Campbell, T. 1983. Some natural history observations of desert tortoises and other species on and near the Desert Tortoise Natural Area, Kern County, California. Proc. 1983 Desert Tortoise Council Symp. 1983: 80-88.

Chaffee, M. A., K. H. Berry, and B. B. Houser. 1999. The relation between the geochemistry of surficial materials and desert tortoise mortality in selected study sites, southeastern California--a progress report. Proceedings of the 1997-1998 Desert Tortoise Council Symposia. Abstract.

Chambers Group, Inc. 1990a. Survey of the desert tortoise within the proposed expansion and isolation areas for the National Training Center (NTC) Fort Irwin, California. Unpublished report prepared on behalf of the Department of the Army, Los Angeles District Corps of Engineers. Contract No. DACA09-89-D-0012.

Chambers Group, Inc. 1990b. Final cumulative impacts study on the desert tortoise in the western Mojave Desert. Unpublished report prepared on behalf of U.S. Army Corps of Engineers Los Angeles District and National Training Center Fort Irwin, California. Santa Ana, CA.

Chambers Group, Inc. 1994. Final report. Survey for desert tortoise (Gopherus agassizii) on the North Alvord Slope, San Bernardino County, California. Unpublished report prepared for U.S. Army Corps of Engineers, Los Angeles District, Los Angeles, CA.

Charis Corporation, 2002, Distribution and abundance of Lane Mountain milk-vetch (*Astragalus jaegerianus*), report of Spring-Summer 2001 survey, prepared for U.S. Army National Training Center, Fort Irwin, California, Contract No. GS09K99BHD0007, pp.56., maps.

Christopher, M. M. I. Wallis, K. A. Nagy, B. T. Henen, C. C. Peterson, B. Wilson, C. Meienberger, and I. Girard. 1993. Laboratory health profiles of free-ranging desert tortoises in California: interpretation of physiologic and pathologic alterations. Report to Bureau of Land management, Riverside, Ca.

Circle Mountain Biological Consultants. 1995. Habitat Conservation Plan for the authorized incidental take of desert tortoise (*Gopherus agassizii*) from the proposed Wildwash Sand and Gravel Mine Site, San Bernardino County, California. Wrightwood, CA.

Circle Mountain Biological Consultants. 1995. Copper Mountain Mesa water facilities project: Final report for desert tortoise biological monitoring. Unpublished report prepared for USFWS, BLM, and CDFG on behalf of the Joshua Basin Water District. Wrightwood, CA.

Circle Mountain Biological Consultants. 1996. Federal Biological Opinion Analysis for the Proposed Eagle Mountain Landfill Project. Unpublished technical report prepared for CH2M HILL. pp. 11, appendices.

Circle Mountain Biological Consultants. 1997. Indian Wells Valley Water District: Biological guidelines for future construction projects. Unpublished report prepared by Ed LaRue on behalf of the Indian Wells Valley Water District. Wrightwood, CA.

Circle Mountain Biological Consultants. 2000. McCoy Wash Dam, McCoy Wash Watershed Project, Riverside County, California: Biological Assessment for Federally Listed and Proposed Species. Unpublished report prepared on behalf of USDA, Natural Resources Conservation Service. Wrightwood, CA.

Circle Mountain Biological Consultants. 2002. Copper Mountain College: General biological survey and focused desert tortoise survey, on +/- 115 acres in the community of Joshua Tree, San Bernardino County, California. Unpublished report prepared on behalf of The Addington Partnership. Wrightwood, CA.

Clark, D. 1993. Goals and objectives of Mohave ground squirrel protection and Zone A monitoring. An unpublished report prepared by Debi Clark on behalf of the Bureau of Land Management and the West Mojave Coordinated Management Plan. Barstow, CA.

Clark, W.B. 1970. Gold districts in California, Calif. Div. of Mines & Geology, Bull. 193, pp. 186.

Congdon, J.D., A.E. Dunham, and R.C. Van Loben Sels. 1993. Delayed sexual maturity and demographics of Blanding?s turtles (Emydoidea blandingii): implications for conservation and management of long-lived organisms. Conservation Biology 7:826-833.

Corn, P.S. 1994. Recent trends of desert tortoise populations in the Mojave Desert. In R. B. Bury and D. J. Germano, editors. Biology of North American tortoises. National Biological Survey, Fish and Wildlife Research 13.

Cunningham, Laura. 2001. Snowy Plover Survey for Warm Sulphur Springs, Post Office Springs, and Koehn Lake. Report prepared for BLM, Ridgecrest Field Office, Ridgecrest, CA.

Davis, J.F. and T.P. Anderson. 1980. "Mineral Resources of the California Desert-An Overview" *in* Geology and Mineral Wealth of the California Desert, South Coast Geological Society, pp. 122-127.

Dean, Leslie E. 1978. The California Desert Sand Dunes. Report from the Dept, of Earth Sciences, Univ. of Calif. Riverside. Supported by U.S. Dept. of the Interior, BLM and National Aeronautics and Space Administration.

Dellinger, D.A. 1989. California's unique geologic history and its role in mineral formation, with emphasis on the mineral resources of the California Desert Region: The California Desert Mineral Symposium, Compendium, Bureau of Land Management, Sacramento, Calif., pp. 47-63.

Desert Tortoise Compensation Team. 1991. Compensation for the Desert Tortoise. A report prepared for the Desert Tortoise Management Oversight Group by the Desert Tortoise Compensation Team, approved by the MOG in November 1991. pp.15, appendices.

Desert Tortoise Task Force. 1991. Preliminary draft: Desert tortoise compensation/ mitigation plan for the proposed expansion of the National Training Center, Fort Irwin, California. Unpublished, preliminary draft report prepared for U.S. Army Corps of Engineers, Los Angeles District and National Training Center, Fort Irwin, CA.

Dibblee, T.W., Jr. 1967. Areal geology of the western Mojave Desert, California, U.S. Geological Survey Professional Paper 522, pp.153.

Dibblee, T.W., Jr. 1970. Geology of the Transverse Ranges, *in* Mineral Information Service, Calif. Div. of Mines and Geology, V. 23, No. 2, pp.35-37.

Doak, D., P. Kareiva and B. Klepetka. 1994. Modeling population viability for the desert tortoise in the western Mojave Desert. Ecological Applications. 4(3), 1994, pp. 446-460

Doan, D.B. and W.D. Menzie. July 2001. International update: the globalization of mining: Mining Engineering, SME, Littleton CO, pp. 33-35.

Dobson, A. and M. Meagher. 1996. The population dynamics of brucellosis in the Yellowstone National Park. Ecology 77:1026-1036.

Dodd, C. K., Jr. 1986. Desert and gopher tortoises: Perspectives on conservation approaches. *In* D. R. Jackson and R. J. Bryant (eds.). The Gopher Tortoise and Its Community. Proceedings of the 5th Annual Meeting of the Gopher Tortoise Council. pp.54-72.

Duda, J.J., and A.J. Krzysik. 1998. Radiotelemetry study of a desert tortoise population: Sand Hill Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California. U.S. Army Corps of Engineers, USA CERL Technical Report 98/39. pp.75.

Duda, J. J., A. J. Krzysik and J. E. Freilich. 1999. Effects of drought on desert tortoise movement and activity. Journal of Wildlife Management 63(4): 1181-1192.

Economic & Planning Systems, Inc. 2002. Economic analysis of critical habitat designations for the San Bernardino carbonate plants, report prepared for U.S. Fish and Wildlife Service located in Arlington, VA. EPS: 2501 Ninth Street, Suite 200, Berkeley, CA 94710, pp. 95.

Endangered Species Consultation on the Effects of the California Desert Conservation Area Plan on Southwestern Willow Flycatcher, Least Bell's Vireo, and Arroyo Toad. Carlsbad Office, December 17, 2002, FWS-ERIV-2600.2

Esque, T. C. 1994. Diet and diet selection of the desert tortoise (Gopherus agassizii) in the northeast Mojave Desert. M.Sc. Thesis, Colorado State Univ. Fort Collins, CO.
Evans, J.R., T.P. Anderson, M.W. Manson, R.L. Maud, W.B. Clark, and D.L. Fife. February 1977. Aggregates in the Greater Los Angeles Area, California, Calif. Div. of Mines and Geology, Open File Report 77-1 LA, pp.9, map.

Evans, J.R., T.P. Anderson, M.W. Manson, R.L. Maud, W.B. Clark, and D.L. Fife. 1979. Aggregates in the greater Los Angeles area, California, Calif. Div. of Mines and Geology, Special Report 139, pp. 96.

Falasco, L.A. April 5, 2001. Bureau of Land Management presentation by Executive Director of the Construction Materials Association of California, pp.11.

Farrell, J. 1989. Some natural history observations of raven behavior and predation on desert tortoises. Proceedings of the Desert Tortoise Council Symposium. Vol. 1987-1991. Abstract. pp. 168.

Feldmeth, R. and R. F. Clements. 1990. City-wide survey of desert tortoise and Mojave ground squirrel: Final report. Rpt. for City of Palmdale. Ecological Research Services, Claremont, CA.

Fife, D.L. 1982. Mineral potential of the Silver Reef-Blackhawk landslide complex, Lucerne Valley, Calif.: Geology and mineral wealth of the California Transverse Ranges, South Coast Geological Society, Santa Ana, Calif., pp. 477-484.

Fife, D.L. 1986. A history of the mining, geology and the mineral wealth of Lucerne Valley: Lucerne Valley 1986 Guide to high desert living, Lucerne Valley Chamber of Commerce, produced for the community by C.W. (Charlie) Parsons, L.V.C. of C. 32750 Old Woman Springs Road, Lucerne Valley, CA 92356, pp. 28-39.

Fife, D.L. 1988. Mineral wealth of Lucerne Valley: California Div. of Mines and Geology, California Geology, v. 41, no. 8, pp. 171-177.

Fife, D.L. July 9, 1999. Testimony on USFWS Endangered Species Act before the Committee on Resources, Honorable Don Young, Chairman, the United States House of Representatives, Honorable Richard Pombo, Chairman for Congressional ESA Oversight Hearing regarding the Carlsbad Office of the U.S. Fish and Wildlife Service; testimony offered by Director of the Holcomb Valley Mining District & Chairman, National Association of Mining Districts, 5 p., attachment: “Limestone endemic” plants in the San Bernardino Mountains, examination of the facts, by Howard Brown, Pluess-Staufer, Lucerne Valley, pp. 458-465.

Fletcher, D.I. 1986. Geology and genesis of the Waterloo and Langtry silver-barite deposits, California: Stanford University Ph. D. dissertation, pp. 202.

Fowler, Catherine S., Molly Dufort, and Mary K. Rusco. 1995. Timbisha Shoshone Tribe’s Land Acquisition Program: Anthropological Data on Twelve Study Areas. Funded by Administration for Native Americans.

Freilich, Jerome E.; Burnham, Kenneth P.; Collins, Christopher M.; Garry, C. Ann Factors affecting population assessments of desert tortoises . [Factores que afectan la evaluatión poblacional de tortugas del desierto.] Conservation Biology, 14(5): 1479-1489. 2000

Frenkel, R. E. 1970. Ruderal vegetation along some California roadsides. Univ. Calif. Press, Berkeley.

Garfinkel, Alan P. 1976. *A Cultural Resource Management Plan for the Fossil Falls/Little Lake Locality.* Bureau of Land Management, Bakersfield District Office. Reprinted 1980, Bureau of Land Management, California Desert District Cultural Resources Publications.

Goodlett, G. O and G. C. Goodlett. 1991. Evidence of unauthorized off-highway vehicle activity in the Rand Mountains and Fremont Valley, Kern County, California. Unpublished report prepared on behalf of the Desert Tortoise Preserve Committee, Inc. Ridgecrest, CA.

Goodlett, G. O. and G. C. Goodlett. 1993. Studies of unauthorized off-highway vehicle activity in the Rand Mountains and Fremont Valley, Kern County, California. Proc. 1992 Desert Tort. Counc. Symp. 1993:163-187.

Gray, C.H. 1982. Limestone and dolomite resources of the Transverse Ranges, southern California: Geology and Mineral Wealth of the California Transverse Ranges, South Coast Geological Society, Santa Ana, Calif., pp. 213-218.

Grumbles, J. S., L. C. Zimmerman, D. C. Rostal, R. H. George and M. O'Connor. 1993. Variation in upper respiratory tract disease at the Desert Tortoise Conservation Center, Las Vegas, Nevada: Occurrence, hematologic and biochemical. Proceedings of the Desert Tortoise Council Symposium. Vol. 1993. Abstract. pp. 55.

Gustafson, J. R. 1993. A status review of the Mohave ground squirrel (*Spermophilus mohavensis*). California Department of Fish and Game (Sacramento), Wildlife Management Division, Nongame Bird and Mammal Section Report 93-9, 104 pp. + appendices. Sacramento, CA.

Hall, Matthew C. and James P. Barker. 1975. *Background to Prehistory of the El Paso/Red Mountain Desert Region.* United States Department of Interior, Bureau of Land Management, California Desert Planning Program. On file, Bureau of Land Management. Reprinted 1981 in *The Prehistory and Management of Cultural Resources in the Red Mountain Area*. Bureau of Land Management, California Desert District Cultural Resources Publications; Russell L. Kaldenberg, General Editor.

Hafner, D. J. 1992. Speciation and persistence of a contact zone in Mojave Desert ground squirrels, subgenus *Xerospermophilus.* Journal of Mammalogy 73(4): 770-778.

Hafner, D. J. and T. L. Yates. 1983. Systematic status of the Mojave ground squirrel, *Spermophilus mohavensis* (subgenus *Xerospermophilus*). Journal of Mammalogy. 64:397-404.

Hall, E. R. 1981. Mammals of North America. John Wiley & Sons, New York, New York.

Haskell, D. G. 2000. Effects of forest roads on macroinvertebrate soil fauna of the southern Appalachian Mountains. Conservation Biology, Vol. 14, No. 1, February 2000, pp.57-63.

Hastey, E. 1996. Activities and role of the desert tortoise Management Oversight Group in tortoise conservation. Proceedings of the Desert Tortoise Council Symposium, Vol. 1996. Hedrick, J.B. 2002. Yttrium, U.S. Geological Survey, mineral commodity Summaries, pp. 186-187.

Heter, J. Aug. 22, 2002. personal communication with geologist for Channel Basin & Reclamation.

Homer, B.L., K.H. Berry, M.M. Christopher, M.B. Brown, E.R. Jacobson. 1994. Necropsies of desert tortoises from the Mojave and Colorado Deserts of California and the Sonoran Desert of Arizona. University of Florida, Gainesville.

Homer, B.L., K.H. Berry, and E.R. Jacobson. 1996. Necropsies of eighteen desert tortoises from the Mojave and Colorado deserts of California. Final Report to the United States Department of the Interior, National Biological Service, Research Work Order No. 131, Riverside, California, pp. 120.

Homer, B. L., K. H. Berry, M. B. Brown, G. Ellis, E. R. Jacobson. 1998. Pathology of diseases in wild desert tortoises from California. J. Wildl. Diseases 34(3):508-523

Hourdequin, M. (editor). 2000. Special section: Ecological effects of roads. Introduction by the editor. Conservation Biology, Vol. 14, No. 1, February 2000, pp 16-17.

Hovik, D.C., and D.B. Hardenbrook. 1989. Summer and fall activity and movements of desert tortoises in Pahrump Valley, Nevada. Abstract of paper presented at Fourteenth Annual Meeting and Symposium of the Desert Tortoise Council.

Hoyt, D. F. 1972. Mohave ground squirrel survey. Unpublished report prepared on behalf of State of California, The Resources Agency, Department of Fish and Game. University of California, Los Angeles, CA.

Impact Sciences, 1990. California Springs Biological Resources Assessment Fall/Winter/Spring 1989-1990. Report provided by City of Lancaster, Lancaster, CA.

Jacobson, E.R., J.M. Gaskin, M.B. Brown, R.K. Harris, C.H. Gardiner, J.L. LaPointe, H.P. Adams, C. Reggiardo. 1991. Chronic upper respiratory tract disease of free-ranging desert tortoises (*Xerobates agassizii*). Journal of Wildlife Diseases 27(2):296-316.

Jacobson, E.R., J. Schumacher, and K.H. Berry. 1994. Cutaneous dyskeratosis in free-ranging desert tortoises, *Gopherus agassizii,* in the Colorado desert if southern California. Journal of Zoo Wildlife Medicine 25(1):68-81.

Jacobson, E. R., M. B. Brown, P. A. Klein, I. Schumacher, D. Morafka, and R. A. Yates. 1996. Serologic survey of desert tortoises, *Gopherus agassizii*, in and around the National Training Center, Fort Irwin, California, for exposure to *Mycoplasma agassizii*, the causative agent of Upper Respiratory Tract Disease. Proc. 1996 Desert Tort. Counc. Symp. 1996:53-54. Abstract.

Jennings, C.W., and R.G. Strand. 1969. Geologic map of California, Los Angeles sheet, Calif. Div. of Mines and Geology, 1:250,000.

Jennings, W.B. 1993a. Foraging ecology of the desert tortoise (*Gopherus agassizii*) in the western Mojave Desert, California. Proceedings of the Desert Tortoise Council Symposium, Vol. 1993, abstract, pp.14.

Jennings, W. B. 1993b. The importance of washes and washlets to desert tortoises (*Gopherus agassizii*) in the western Mojave Desert. Proceedings of the Desert Tortoise Council Symposium. Vol. 1993. Abstract. pp. 79.

Jennings, W.B. 1997a. Invasions of exotic plants: Implications for the desert tortoise, *Gopherus agassizii*, and its habitat in the western Mojave Desert. Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles - An International Conference, pp. 10-12.

Jennings, W. B. 1997b. Habitat use and food preferences of the desert tortoise, *Gopherus agassizii*, in the western Mojave Desert and impacts of off-road vehicles. Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles - An International Conference. pp. 42-45.

Jennings, W.B. and C.L. Fontenot, Jr. 1992. Observations of the feeding behavior of desert tortoises (*Gopherus agassizii*) at the Desert Tortoise Research Natural Area, Kern County, California. Proceedings of the Desert Tortoise Council Symposium, Vol. 1992, 69-81.

Johnston, R. and J. Belnap. 1996. Soil biota changes along a disturbance gradient: Impacts on vegetation composition and prospects for restoration. Proceedings of the Desert Tortoise Council Symposium, Vol. 1996, 29-31.

Jones, K. B. 1993. Land-use practices: Do they affect different-sized desert tortoises in similar ways? Proceedings of the Desert Tortoise Council Symposium. Vol. 1993. pp. 80-88.

Joseph, S.E., R.V. Miller, S.S. Tan, R.W. Goodman, T.P. Anderson, D.R. Fuller, and E.E. Kiessling. 1987. Mineral Land Classification of the Greater Los Angeles Area, Calif. Div. of Mines and Geology, Special Report 143, Part V, Classification of sand and gravel resource areas Saugus-Newhall and Palmdale production-consumption regions, pp. 46, maps.

Karl, A. E. 2000. Desert tortoise abundance studies associated with the Fort Irwin National Training Center proposed expansion: A review (Draft). Prepared by Alice E. Karl, Ph.D. for Chambers Group, Inc. Davis, CA.

Karl, A. E. 2002. Desert tortoise abundance in the Fort Irwin National Training Center expansion area (Final Report). Prepared by Alice E. Karl, Ph.D. for Charis Corporation. Davis, CA.

Kern County Waste Management Department. 1997. Kern County Waste Facilities Habitat Conservation Plan. Prepared by Kern County Waste Management Department and submitted to U. S. Fish and Wildlife Service, Portland, OR.

Kiva Biological Consulting and McClenahan & Hopkins Associates, Inc. 1990. Estimated distribution and density of the desert tortoise at China Lake, Naval Weapons Center. Unpublished report prepared on behalf of U.S. Navy, Environmental Division, Naval Weapons Center. Ridgecrest and San Mateo, CA.

Knowles, C., C. Guntow, P. Knowles, P. Houghton. 1989. Relative abundance and distribution of the common raven in the desert of southern California. Boulder, MT, FaunaWest Wildlife Consultants.

Knowles, C. J. and K.H. Berry. 1990. Relative abundance and distribution of the common raven in the deserts of southern California and Nevada, Fall 1988 through summer 1989. Proceedings of the Desert Tortoise Council Symposium. Vol. 1987-1991. Abstract. pp. 247.

Kohler, S. 2000. The mineral industry of California, U.S. Geological Survey Minerals Yearbook, pp. 8.

Kohler, S. May 2002. California (mining overview): Mining Engineering, S.M.E., Littleton, Colorado, pp. 49-52.

Kohler, S. & Antablin. May 1999. California (mining overview): Mining Engineering, S.M.E., Littleton, Colorado, pp. 49-52.

Kroeber, A. L. 1925. *Handbook of the Indians of California.* Smithsonian Institution, Bureau of American Ethnology Bulletin 78. Reprinted 1976, Dover Publications, Inc, New York.

Krzysik, A. J. 1992. Review of Chambers Reports Volume I, Volume II, and A survey methodology for the desert tortoise. Unpublished memorandum prepared for U.S. Fish and Wildlife Service, Ventura Field Office. Champaign, IL.

Krzysik, A. J. 1994a. Biodiversity and the threatened/endangered/sensitive species of Fort Irwin, CA. U.S. Army Construction Engineering Research Laboratories. Prepared on behalf of U.S. Army Corps of Engineers, Construction Engineering Research Laboratories. Champaign, IL.

Krzysik, A. J. 1994b. The desert tortoise at Fort Irwin, California. U.S. Army Construction Engineering Research Laboratories. Unpublished report completed by Krzysik for U.S. Army Corps of Engineers, Construction Engineering Research Laboratories. Champaign, IL.

Krzysik, A. J. 1994c. The Mohave ground squirrel at Fort Irwin, California. U.S. Army Construction Engineering Research Laboratories. Unpublished report completed by Krzysik for U.S. Army Corps of Engineers, Construction Engineering Research Laboratories. Champaign, IL.

Krzysik, A. J. 1996. Robust estimators for the distribution and density patterns of desert tortoise populations on landscape scales? Proceedings of the Desert Tortoise Council Symposium, Vol. 1996, abstract, 51.

Krzysik, A. J. 2002a. Statistical analysis of BLM desert tortoise surveys in support of the West Mojave Management Plan: Report I: Exploratory and initial data analysis (1998, 1999, and 2001 Calibration Data).

Krzysik, A. J. 2002b. Statistical analysis of BLM desert tortoise surveys in support of the West Mojave Management Plan, Report II: Statistical comparison of DWMAs (1999 & 2001) . Prepared for West Mojave Plan Team.

Krzysik, A. J. 2002c. Statistical analysis of BLM desert tortoise surveys in support of the West Mojave Management Plan, Report III: Statistical comparison of DWMAs (1999 & 2001) . Prepared for West Mojave Plan Team.

Krzysik, A. J. and A. P. Woodman. 1991. Six years of Army training activities and the desert tortoise. Proceedings of the Desert Tortoise Council Symposium, Vol. 1987 - 1991.

Laabs, D. 1998. Mohave ground squirrel (*Spermophilus mohavensis*). Unpublished species account prepared on behalf of the West Mojave Plan. Santa Cruz, CA.

Laabs, D. M., M. L. Allaback, B. Ellis, D. Mitchell, J. Sawasaki and E. L. LaRue, Jr. 1996. Final Report. Relative density estimates of desert tortoise on Edwards Air Force Base, California. Unpublished report prepared in support of the programmatic environmental assessment for basewide implementation of the Installation Restoration Program (IRP) at Edwards Air Force Base (AFB), CA.

LaBerteaux, Denise L. 2001. Snowy Plover Surveys at Searles Lake, San Bernardino County, California. Report prepared for BLM, Ridgecrest Field Office, Ridgecrest, CA.

LaBerteaux, Denise L. and Garlinger, B. 1998. Inyo California Towhee (*Pipilo crissalis eremophilus*) Census in the Argus and Coso Mountain Ranges, Inyo County, California. Report prepared for Commanding Officer, Naval Air Weapons Station, China Lake, CA.

LaRue, E. L., Jr. 1992. Distribution of desert tortoise sign adjacent to Highway 395, San Bernardino County, California. Proceedings of the 1992 Desert Tortoise Council Symposium 1993: 190-204.

LaRue, E.L. 1994a. A tale of two tortoise 10(a) permits. Proceedings of 1994 Symposium of the Desert Tortoise Council.

LaRue, E. L., Jr. 1994b. Follow-up monitoring report for Stoddard Valley-to-Johnson Valley Point-to-Point Corridor Run. Unpublished report prepared on behalf of the American Motorcyclists Association for the Barstow Resource Area of the Bureau of Land Management. Wrightwood, CA.

LaRue, E. L., Jr. 1996. Final monitoring report for the Copper Mountain Mesa Pipeline Project. Unpublished report prepared for the USFWS and CDFG, on behalf of Krieger & Stewart, Inc. and the Joshua Basin Water District. Wrightwood, CA.

LaRue, E. L., Jr. 1997. Ord Mountain Pilot Study: Recommendations for route designation. Technical Review Team report prepared for the Desert Tortoise Council, and submitted to the Barstow Resource Area of the Bureau of Land Management. Wrightwood, CA.

LaRue, Jr. E. L. 1998. Unpublished plant survey data collected on behalf of the West Mojave Plan during the spring and summer of 1998. Data maintained by the BLM. Riverside, CA.

LaRue, Jr. E. L. and W. I. Boarman. In Prep. Effects of existing and proposed maneuvers at Fort Irwin National Training Center on the desert tortoise, Mohave ground squirrel, and other biological resources. Unpublished, draft report prepared on behalf of the Bureau of Land Management and U.S. Geological Survey. Wrightwood and San Diego, CA.

LaRue, E. L., Jr. and S. Dougherty. 1998. Federal Biological Opinion Analysis for the Proposed Eagle Mountain Landfill Project. Proceedings of 1997-1998 Symposia of the Desert Tortoise Council. pp. 52-58.

Leitner, P. 2000. California Energy Commission and Desert Tortoise Preserve Committee, Mohave ground squirrel study, final report for 1998-1999. Prepared for the Desert Tortoise Preserve Committee. Orinda, CA. 37 pp plus appendices.

Leitner, P. 1998. Comments on the WMCMP Mohave ground squirrel evaluation meeting of October 28, 1998. Unpublished memo, dated 2 November 1998, prepared on behalf of the West Mojave Team outlining Dr. Leitner's concerns with the planning effort. Orinda, CA.

Leitner, P. and B. Leitner. 1989. First year baseline report: Coso grazing exclosure monitoring study: Coso Known Geothermal Resource Area, Inyo County, California. Unpublished report prepared on behalf of McClenahan and Hopkins Associates. Oakland, CA.

Leitner, P. and B. Leitner. 1990. Second year baseline report: Coso grazing exclosure monitoring study: Coso Known Geothermal Resource Area, Inyo County, California. Unpublished report prepared on behalf of McClenahan and Hopkins Associates. Oakland, CA.

Leitner, P. and B. Leitner. 1992. Fourth year baseline report: Coso grazing exclosure monitoring study: Coso Known Geothermal Resource Area, Inyo County, California. Unpublished report prepared on behalf of McClenahan and Hopkins Associates. Oakland, CA.

Leitner, P. and B. Leitner. 1996a. A comparison of the diets of the Mohave ground squirrel and cattle: Results of a long-term study in the Coso Region of Inyo County. Unpublished report prepared on behalf of CalEnergy Company, Inc. Orinda, CA.

Leitner, P. and B. Leitner. 1996b. Coso grazing exclosure monitoring study: Mohave ground squirrel study, Coso Known Geothermal Resource Area: Major findings, 1988-1996. Unpublished report prepared on behalf of CalEnergy Company, Inc. Orinda, CA.

Leitner, P. and B. Leitner. 1998. Final Report: Coso grazing exclosure monitoring study: Mohave ground squirrel study, Coso Known Geothermal Resource Area: Major findings, 1988-1996. Unpublished report prepared on behalf of CalEnergy Company, Inc. Orinda, CA.

Leitner, P., B. Leitner and J. H. Harris. 1995. Mohave ground squirrel study in Coso Known Geothermal Resource Area, Inyo County, California, March-June, 1994. Unpublished report prepared on behalf of Jean Hopkins and Associates. Orinda, CA.

Leitner, P., B. Leitner and J. H. Harris. 1997. Mohave ground squirrel study in the Coso Known Geothermal Resource Area, Inyo County, California, 1995 and 1996. Unpublished report prepared on behalf of CalEnergy Company, Inc. Orinda, CA.

Leszcykowski, A., et al., 1993, Mineral resources of the West Mojave Desert tortoise habitat (category one and two lands), U.S. Bureau of Mines, Western Field Operations Center, Special Publication, unpublished report prepared at the request of the BLM to conduct a study of the mineral resources as mandated by the National Materials and Minerals Policy, Research and Development Act of 1980, pp. 68, Appendix A & B, four plates, 1:100,000 scale.

Lines, Gregory C. 1999. Health of Native Riparian Vegetation and its Relation to the Hydrologic Conditions along the Mojave River, Southern California. U. S. Geological Survey, Water Resources Investigations Report 99-4112, Sacramento, CA.

Liljeblad, Sven and Catherine S. Fowler. 1986. Owens Valley Paiute. In: *Handbook of North American Indians, Vol. 11: Great Basin.* Warren L. D'azevedo, Vol. Editor. Smithsonian Institution, Washington.

Lofgren, Donald L. n.d. Paleocene Mammals from south central California. Raymond M. Alf Museum of Paleontology, Claremont, CA.

Lofgren, Don, Malcolm McKenna, and Steve Walsh.2001. *Vertebrate Paleontology of the Goler Formation, El Paso Mountains, California: Field Guide for WAVP 2002.* Raymond Alf Museum of Paleontology, Claremont, CA.

Lovich, J.E. 1992. Natural recovery rates of desert tortoise habitat from anthropogenic effects. Proceedings of the Desert Tortoise Council Symposium, Vol. 1992, Abstract, 205.

Lovich, J. E. and D. Bainbridge. 1999. Anthropogenic degradation of the southern California desert ecosystem and prospects for natural recovery and restoration. Environmental Management. Vol. 24, No. 3, pp 309-326.

Luckenbach, R.A. 1982. Ecology and management of the desert tortoise (*Gopherus agassizii*) in California. *In*: R.B. Bury (ed.). North American Tortoises: Conservation and Ecology. U.S. Fish and Wildlife Service, Wildlife Research Report 12, Washington, D.C.

Lyday, P.A. 2001. Boron: U.S. Geological Survey, Minerals Yearbook 2001, pp. 13.1-13.8, seven tables.

Lyneis, Margaret M., David L. Weide, and Elizabeth vonTill Warren. 1980. *Impacts: Damage to Cultural Resources in the California Desert.* Bureau of Land Management, California Desert District Cultural Resources Publications, Eric W. Ritter, General Editor.

Medica, P.A., R.B. Bury, and R.A. Luckenbach. 1982. A comparison of 1981 populations of desert tortoises, *Gopherus agassizii,* in grazed and ungrazed areas in Ivanpah Valley, California. Proceedings of the 1982 Symposium, Desert Tortoise Council.

Michael Brandman Associates, Inc. 1988. Phase One: China Lake Naval Weapons Center, Mohave ground squirrel survey and management plan. An unpublished report prepared on behalf of Naval Weapons Center Environmental Resources Management Branch. Santa Ana, CA.

Miller. R.V. 1993. Mineral land classification of concrete aggregate resources in the Barstow-Victorville area, Calif. Div. of Mines and Geology, open file report 92-06, pp. 68.

Miller. R.V. January 1994. Mineral land classification of concrete aggregate resources in the Barstow-Victorville area, San Bernardino County: Calif. Div. of Mines and Geology, California Geology, v. 47, no. 1, pp. 3-9.

Minnich, R.A. 1994. Postfire succession in desertscrub communities of southern California. Proceedings of the Desert Tortoise Council Symposium, Vol. 1994, 93-112.

Mitchell, D. R., K. E. Buescher, J. R. Eckert, D. M. Laabs, M. L. Allaback, S. J. Montgomery and R. C. Arnold. 1993. Biological resources environmental planning technical report. Unpublished report prepared in support of the programmatic environmental assessment for basewide implementation of the Installation Restoration Program (IRP) at Edwards Air Force Base (AFB), CA.

Morafka, D. J. 2000. Biogeography, Demographics and Potential Management of the Mojave Fringe-toed Lizard (*Uma scoparia*): A Species of Special Concern at the NTC, Fort Irwin, CA and in Proposed Acquisition Areas. Contract report to U. S. Army. Fort Irwin, CA.

Moyle, P.R. and E.E. Cather. 1992. Mineral classification in the California Desert Conservation Area, Open File Report 62-92, prepared to illustrate the variety of potential impacts which could occur should the California Desert Protection Act or similar legislation become law, U.S. Bureau of Mines, Western Field Operations Center, Spokane, WA, pp. 67.

Nagy, K.A. and P.A. Medica. 1986. Physiological ecology of desert tortoises in southern Nevada. Herpetologica 42(1):73-92.

Nagy, K.A., B.T. Henen, and D.B. Vyas. 1998. Nutritional quality of native and introduced food plants of wild desert tortoises. Journal of Herpetology. 32:260-267.

National Ecology Research Center. 1990. Assessment of biological information for listing the desert tortoise as an endangered species in the Mojave Desert. Predecision document prepared by NERC and submitted to U.S. Fish and Wildlife Service, Region One. Fort Collins, CO.

Nicholson, L. 1978. The effects of roads on desert tortoise populations. Unpublished report in fulfillment of contract #CA-060-CT8-000024, Bureau of Land Management, CA.

Norris, Frank and Richard L. Carrico. 1978. *A History of Land Use in the California Desert Conservation Area.* Desert Planning Staff, Bureau of Land Management, USDI.

Norris, R.M., and R.W. Webb. 1976. Geology of California, John Wiley & Sons, Inc., Santa Barbara, Calif., pp. 365.

Norwood, Richard H., Charles S. Bull, and Ronald Quinn. 1980. *A Cultural Resource Overview of the Eureka, Saline, Panamint and Darwin Region, East Central, California.* Bureau of Land Management, California Desert District Cultural Resources Publications; Eric Ritter, General Editor.

Nowak, R. M. 1991. Walker's Mammals of the World. 5th ed. The Johns Hopkins University Press. Baltimore, Maryland.

Oftedal, O.T. 2001. Low rainfall affects the nutritive quality as well as the total quantity of food available to the desert tortoise. Proceedings of the 2001 Symposium, Desert Tortoise Council (Abstract).

Oldemeyer, J.L. 1994. Livestock grazing and the desert tortoise in the Mojave Desert. In R.B. Bury and D.J. Germano, editors. Biology of North American tortoises. National Biological Survey, Fish and Wildlife Research 13.

Origgi, F., C. H. Romero, P. Klein, K. Berry, and E. Jacobson. 2002. Serological and molecular evidences of herpesvirus exposure in desert tortoises from the Mojave Desert of California. Desert Tortoise Council Symposium, March 22-25, 2002, Palm Springs, CA. Abstract.

PCR Services Corporation, Frank Hoover & Associates, & FORMA Systems. November 2000. Biological resources assessment of the proposed Antelope Valley significant Ecological Area, prepared for L.A. County, pp. 34.

Peterson, C. C. 1993. Different rates and causes of high mortality in two populations of the threatened desert tortoise *Gopherus agassizii*. Biological Conservation, 80, 1994. pp. 101-108.

Peterson, C. C. 1994a. Different rates and causes of high mortality in two populations of the threatened desert tortoise *Gopherus agassizii*. Biological Conservation. 70:101-108.

Peterson, C. C. 1994b. Physiological ecology of the desert tortoise, *Xerobates agassizii* . pp. 213-224 in: P. R. Brown and J. W. Wright, eds., Herpetology of the North American Deserts. Proceedings of a Symposium.

Pettan-Brewer, K. C. B., M. L. Drew, E Ramsay, F. C. Mohr, J. J. Lowenstine. 1996. Herpesvirus particles associated with oral and respiratory lesions in a California desert tortoise (Gopherus agassizii). Journal of Wildlife Diseases 32: 521-526.

Portland Cement Association. 1997. Summary Report for United States Portland cement plants (ranked by size, largest to smallest), available from Google search engine for "cement plants", or

http://www.epa.gov/ttn/atw/pcem/plantlis.pdf. PCA, 5420 Old Orchard Road, Skokie, IL 60077.

Rado, T. 1990. Results of the 1989 pilot raven control program. Proceedings of the Desert Tortoise Council Symposium. Vol. 1987-1991. pp. 266-272.

Raisz, E. 1957. Landforms of the United States, map scale 0.7" = 50 miles, 107 Washington Ave., Cambridge, Mass.

RANDOL International LTD. 1988-1990. RANDOL Mining Directory: Golden, Colorado.

Recht, M. A. 1977. The biology of the Mohave ground squirrel, *Spermophilus mohavensis*; home range, daily activity, foraging and weight gain, and thermoregulatory behavior. PhD dissertation at University of California Los Angeles. Los Angeles, CA.

Rey, M. January 9, 2002. Speech before the Northwest Mining Association by the Department of Agriculture Undersecretary for the Environment and Minerals: Sierra Times, Pahrump, Nevada.

Rogers, B. January 1987. Desert hot mineral waters eyed for use in new houses, San Bernardino Sun newspaper.

Savage, Donald E. and Theodore Downs. 1954. Cenozoic Land Life of Southern California. In Geology of Southern California: Historical Geology. *California Division of Mines Bulletin* 170, Contribution 6.

Schamberger, M., and F.B. Turner. 1986. The application of habitat modeling to the desert tortoise (*Gopherus agassizii*). Herpetologica 42(1):134-138.

Schroeder, A. M. 1993. Effect of tamarisk removal on avian distributions at Camp Cady Wildlife Area in the California Mojave Desert", Master's thesis, California State University, Fullerton, CA.

Schumacher, I. M., D. B. Hardenbrook, M. B. Brown, E. R. Jacobson, and P. A. Klein. 1997. Relationship between clinical signs of Upper Respiratory Tract Disease and antibodies to *Mycoplasma agassizii* in desert tortoises from Nevada. J. Wildl. Diseases 33:261-266.

Sharp, R.P. 1975. Natural Provinces of southern California, *in* Geology field trip guide to southern California, Kendall/Hunt Publishing Co., Dubuque, Iowa, p. 11-5.

Siefke, J.W. 1991. The Boron open pit mine at the Kramer borate deposit, reprinted from the Diversity of Mineral and Energy Resources of Southern California, Guidebook Series, v. 12, p. 4-15, Society of Economic Geologists, McKibben, M.A., ed.

Steward, Julian H. 1933. Ethnography of the Owens Valley Paiute. *University of California Publications in American Archaeology and Ethnology* 33:233-350. Berkeley.

Steward, Julian H. 1938. *Basin-Plateau Aboriginal Sociopolitical Groups.* Smithsonian Institution, Bureau of American Ethnology Bulletin 120. Reprinted 1970, University of Utah Press, Salt Lake City, Utah.

Stickel, E. Gary and Lois J. Weinman-Roberts. 1980. *An Overview of the Cultural Resources of the Western Mojave Desert.* Bureau of Land Management, California Desert District Cultural Resources Publications; Eric W. Ritter, General Editor.

Stow, D. 1988. Interpretation of aerial photographs to measure off-road vehicle disturbances in the California Desert District. Part A of an unpublished report prepared on behalf of the Bureau of Land Management. San Diego, CA.

Taylor, G.C. 1994. Mineral land classification of a part of southwestern San Bernardino County: The Big Bear Lake - Lucerne Valley area, California, Calif. Div of Mines and Geology, Open-File Report 94-06, pp. 79.

Tennant, Patrick. 2002. "The impacts of Saltcedar (*Tamarix ramosissima*) on the avian community of a Mojave Desert wildlife area", Master's thesis, California State University, Fullerton, CA.

Thomas, David H., Lorann S.A. Pendleton, and Stephen C. Cappannari. 1986. Western Shoshone. In *Handbook of North American Indians, Vol. 11: Great Basin.* Warren L. D'azevedo, Vol. Editor. Smithsonian Institution, Washington.

Tierra Madre Consultants, Inc. 1991. Biological Assessment for Lancaster City and planning area: Relative density surveys for desert tortoises and cumulative human impact evaluations for Mohave ground squirrel habitat. Unpublished report prepared by Ed LaRue on behalf of the City of Lancaster. Riverside, CA.

Tierra Madre Consultants, Inc. 1992. Biological Assessment for the George Air Force Base Redevelopment Project, San Bernardino County, California. Unpublished report prepared by Ed LaRue on behalf of Victor Valley Economic Development Authority. Riverside, CA.

Tierra Madre Consultants, Inc. 1993a. Technical Biological Assessment for the Town of Yucca Valley General Plan. Unpublished report prepared by Ed LaRue on behalf of the Town of Yucca Valley. Riverside, CA.

Tierra Madre Consultants, Inc. 1993b. Draft Environmental Assessment for issuance of a permit to allow incidental take of desert tortoise (*Gopherus agassizii*), a threatened species, under Section 10(a)(1)(B) of the Endangered Species Act to Valley Community Chapel and Good Shepherd Lutheran Church for a five-acre site in Yucca Valley, San Bernardino County, California. Draft Environmental Assessment for California's first 10a permit authorizing take of tortoises, which was issued in 1993. pp. 24.

Tierra Madre Consultants, Inc. 1994. Implementation Agreement By and Between Sunland Communities, U.S. Fish and Wildlife Service, and California Department of Fish and Game for Tentative Tract 14265 in Western Victorville, San Bernardino County, California.

Tosdal, R.M., Keith, W.J., Rytuba, J.J., Jachens, R.C., Conrad, J.E., Calzia, J.P., Nowlan, G.A., Hofstra, A.H. and Folger, H.W., 1992a, Permissive terranes for metallic and selected non-metallic mineral resources, West Mojave Management Area, southern California, U.S. Geological Survey unpulbished report prepared on behalf of the California Desert District, U.S. Bureau of Land Management, pp.21, map 1:250,000.

Tosdal, R.M., J.J. Rytuba, T.G. Theodore, J.P. Calzia, S.L. Ludington, R.C. Jachens, G.A. Nowlan, R.J. Miller, K.R. Bishop,W.J. Keith, S. Ludington, R.L. Hill, D. Carlisle, P.G. Feiss, J.S. Miller, K.D. Walker, and K.A. Howard. Dec. 1992b. Evaluation of selected metallic and nonmetallic mineral resource, West Mojave Management Area, southern California, U.S. Geological Survey, Open File Report 92-595, pp.89.

Town of Yucca Valley, 1995. Draft Environmental Impact Report for the Yucca Valley Comprehensive General Plan. Town of Yucca Valley, CA.

Tracy, C. R. 1995. Patterns of fire incidence and implications for management of Desert Wildlife Management Areas. Proc. 1994 Desert Tort. Counc. Symp. 1995:179.

Trombulak, S. C. and C. A. Frissell. 2000. Review of ecological effects of roads on terrestrial and aquatic communities. Conservation Biology, Vol. 14, No. 1, February 2000.

Turner, F.B. and D.E. Brown. 1982. Sonoran desertscrub. In: D.E. Brown (editor). Biotic communities of the American Southwest - United States and Mexico. Desert Plants 4(1-4):181-222.

Turner, F.B., K.H. Berry, D.C. Randall, and G.C. White. 1987. Population ecology of the desert tortoise at Goffs, California 1983-1986. Report to South. Calif. Edison. Laboratory of Biomed. and Environ. Sci., Univ. Calif, Los Angeles.

U.S. Bureau of Land Management. 1980. The California Desert Conservation Area Plan, Riverside District Office.

U.S. Bureau of Land Management. 1989. The California Desert minerals compendium, held at Marriott Hotel, Irvine, California: 38 papers representing the policy of multiple use and research associated with mineral exploration and development in the CDCA. California State Office, Sacramento. Contributions were generated by the scientific community, industry, and the government in response to increasing interest in the California Desert mineral resources, pp. 412.

U.S. Bureau of Land Management. 1990a. Draft raven management plan for the California Desert Conservation Area. U.S. Dept. of Interior, Bureau of Land Management, Riverside, CA. 59 pp.

U.S. Bureau of Land Management. April 1991. Division of Mineral Resources The California Desert, Why mining is important, prepared as a supplement to be presented to Congress for the pending wilderness legislation, pp. 83.

U.S. Bureau of Land Management. 1991b. Western Mojave Land Tenure Adjustment Project, Record of Decision. Unpublished report prepared by the California Desert District. Riverside, CA.

U.S. Bureau of Land Management. 1993.

U.S. Bureau of Land Management. 1996. Vegetation communities in the WMCMP. Early planning document, dated 15 May 1996, that documents plant communities occurring in the planning area and methodologies for how the vegetation map was derived. (File name: "WMAPPEND.DOC"), pp. 55 and 105-118.

U.S. Bureau of Land Management. 1999a. Current Management Situation of Special-Status Species in the West Mojave planning area. Emily Cohen, Editor. Unpublished report produced by West Mojave Team to assess current management and gaps in the protection for species covered by the Plan. Barstow, CA.

U.S. Bureau of Land Management. 1999b Desert tortoise biological evaluation: Proposed management prescriptions and management areas identified for the conservation of the desert tortoise (*Gopherus agassizii)* in the West Mojave Desert, California. Unpublished report produced by West Mojave Team to document evaluations completed by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Barstow, CA.

U.S. Bureau of Land Management. 1999c. West Mojave Plan Draft Evaluation Report, Suggested Conservation Strategies. ? Biological Evaluation? prepared by the West Mojave Team.

U.S. Bureau of Land Management. 1999d. Desert Tortoise Biological Evaluation: Proposed Management Prescriptions and Management Areas Identified for the Conservation of the Desert Tortoise (*Gopherus agassizii*) in the West Mojave Desert, California. Unpublished report prepared by the West Mojave Team to document evaluations completed by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Barstow, CA.

U.S. Bureau of Land Management. 2000. Mohave ground squirrel biological evaluation: Proposed management prescriptions and management areas identified for the conservation of the Mohave ground squirrel (*Spermophilus mohavensis)* in the West Mojave Desert, California. Unpublished report produced by West Mojave Team to document evaluations completed by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Barstow, CA.

U.S. Bureau of Land Management. 1981. M*anagement Plan for Rock Spring, An Area of Critical Environmental Concern.* Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1982. *Management Plan for Soggy Dry Lake Creosote Rings Preserve, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1982. M*anagement Plan for Denning Spring, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1982. *Management Plan for Salt Creek Hills, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1983. *Management Plan for Amargosa Canyon Natural Area, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1984. *Management Plan for Calico Early Man Site, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1985. *Management Plan for Cronese Lakes, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1988. *Management Plan for Black Mountain Cultural Area, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1988. *Management Plan for Greenwater Canyon Cultural Area, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1988. *Management Plan for Juniper Flats Cultural Area, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management.???? M*anagement Plan for Manix Basin, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1989. Management Plan for Afton Canyon Natural Area and the Surrounding Area. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1990. *Management Plan for Dumont Dunes Off-Highway Vehicle Area.* Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1991. M*anagement Plan for Rainbow Basin Natural Area, An Area of Critical Environmental Concern.* Barstow Resource Area. Barstow.

U.S. Bureau of Land Management. 1992. *Management Plan for the Rodman Mountains Cultural Area, An Area of Critical Environmental Concern*. Barstow Resource Area. Barstow.

U.S. Bureau of Land Management and California Department of Fish and Game. 1992. California Statewide Desert Tortoise Management Policy. Official policy signed in 1992 by the District Manager and State Director of the BLM and Regional Managers (Regions 4 and 5) and the Director of the CDFG.

U.S. Bureau of Mines. 1983. The domestic supply of critical minerals, pp. 49.

U.S. Bureau of Mines. 1988. List of strategic and critical minerals and metals, rated according to net import reliance of 50% or more in 1987, or on National Defense Stockpile List (9-30-1987).

U.S. Bureau of Mines. Oct. 1993. Economic Analysis of the minerals potential of the West Mojave Management Area, including the desert tortoise priority habitat, California, Executive Summary, U.S. Bureau of Mines Open File Report 31-93, Western Field Operations Center, prepared for the BLM to present information on the economic significance of mineral resources in the West Mojave Management Area, pp. 5.

U.S. Department of Defense, 2000, Strategic and critical materials report to the Congress, Annual report on operations of the National Defense Stockpile (NDS).

U.S. Fish and Wildlife Service. 1988. Biological resource inventory, Mojave B - Range South, San Bernardino County, California. Prepared on behalf of U.S. Army Corps of Engineers. Laguna Niguel, CA.

U.S. Fish and Wildlife Service. 1989. Biological opinion for the Barstow to Vegas Motorcycle Race, San Bernardino County, California and Clark County, Nevada (6840 2800 CA-932.1) (FWS/LNFO 1-6-89-F-81). Memorandum from Acting Field Supervisor, Fish and Wildlife Service, Laguna Niguel Field Office, to State Director, Bureau of Land Management, Sacramento, CA.

U.S. Fish and Wildlife Service. 1989. Observations of Barstow to Vegas Motorcycle Race, November 24 and 25, 1989 (FWS/FWE 1-6-89-F-61). Memorandum from Acting Field Supervisor, Fish and Wildlife Service, Laguna Niguel Field Office, to State Director, Bureau of Land Management, Sacramento, CA.

U.S. Fish and Wildlife Service. 1991a. Biological opinion for the U.S. Army=s current mission at the National Training Center, Fort Irwin, California (1-6-91-F-42). Memorandum from Field Supervisor, Laguna Niguel to Brigadier General Wesley Clark, Department of the Army.

U.S. Fish and Wildlife Service. 1991b. Draft jeopardy biological opinion on the proposed expansion of the National Training Center at Fort Irwin, California (1-6-91-F-41). Memorandum from Field Supervisor, Laguna Niguel to Assistant Regional Director, Fish and Wildlife Enhancement, Region 1, Portland, Oregon (ATTN: Richard Hall).

U.S. Fish and Wildlife Service. 1992. Field survey protocol for any non-federal action that may occur within the range of the desert tortoise. Unpublished report provided by the Ventura office of the Service. Ventura, CA. [A corresponding protocol addresses federal actions].

U.S. Fish And Wildlife Service. June 1, 1992. Biological opinion for small mining and exploration operations in the California Desert, memorandum to the State Director, Bureau of Land Management, Sacramento California, pp. 15.

U.S. Fish and Wildlife Service. 1994. Desert tortoise (Mojave population) Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 73 pages plus appendices.

U.S. Fish and Wildlife Service. June 1994. Desert Tortoise (Mojave Population) Recovery Plan, pp. 73, appendices.

U.S. Fish and Wildlife Service. 1994a. Endangered and threatened wildlife and plants; determination of critical habitat for the Mojave population of the desert tortoise. *Federal Register* 55(26):5820-5866. Washington, D.C.

U.S. Fish and Wildlife Service. 1994b. Desert tortoise (Mojave Population) Recovery Plan. U.S. Fish and Wildlife Service, Portland, OR. pp. 73, plus appendices.

U.S. Fish and Wildlife Service. March 5, 2002a. Biological Opinion for the California Area Plan [Lane-Mountain Milk-vetch, Ash Meadows Gumplant, and Amargosa Niterwort], pp. 52.

U.S. Fish and Wildlife Service. 2002b. Draft Biological Opinion for the California Desert Conservation Area Plan [Desert Tortoise] (6840(P) CA-063.50) (1-8-01-F-16). Draft memorandum from Field Supervisor, Ventura Fish and Wildlife Office, Ventura, California to State Director, Bureau of Land Management, Sacramento, California.

U.S. Fish and Wildlife Service. 2002c. Biological opinion for the California Desert Conservation Area Plan [Desert Tortoise] (6840(P) CA-063.50) (1-8-01-F-16). Memorandum from Field Supervisor, Ventura Fish and Wildlife Field Office, Ventura, CA, to State Director, Bureau of Land Management, Sacramento, CA.

U. S. Fish and Wildlife Service, 2002d. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Five Carbonate Plants From the San Bernardino Mountains in Southern California; Final Rule. *Federal Register* 67 (247):78570-78610.

Ver Planck, W.E. 1957. Stontium: California Division of Mines and Geology, Mineral Commodities of California, Bull. 176, pp. 607-611.

Vollmer, A. T., B. G. Maza, P. A. Medica, F. B. Turner and S. A. Bamberg. 1976. The impact of off-road vehicles on a desert ecosystem. Environmental Management Vol 1, No. 2, pp. 115-129. Springer Verlag, New York.

W & S Consultants. 2002. Archaeological Investigation of the Timbisha Trust Parcels, Inyo County, California. On file, Bureau of Land Management, Ridgecrest Field Office, Ridgecrest, CA.

Warren, Elizabeth von Till and Ralph J. Roske. 1980. *Cultural Resources of the California Desert, 1776 – 1980: Historic Trails and Wagon Roads.* Bureau of Land Management, California Desert District Cultural Resources Publications; Russell L. Kaldenberg, Series Editor.

Webb, R. H., H. G. Wilshire and M. A. Henry. 1983. Natural recovery of soils and vegetation following human disturbance. *In* Webb, R. H. and H. G. Wilshire (Editors). Environmental effects of off-road vehicles: Impacts and management in arid regions. Springer-Verlag, New York.

Wehtje, Walter. 2001. Distribution and Breeding Status of the Western Snowy Plover (*Charadrius alexandrinus nivosus*) at Five Sites within the Bureau of Land Management, California Desert District, Barstow Field Office Resource Area.

Weinstein, M., K.H. Berry, and F.B. Turner. 1987. An analysis of habitat relationships of the desert tortoise in California. A report to Southern California Edison Company. Rosemead, California.

Weinstein, M. N. 1989. Modeling desert tortoise habitat: Can a useful management tool be developed from existing transect data? A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Environmental Science and Engineering. University of California, Los Angeles.

Weinstein, M. 1993. Health profile results from the Honda desert tortoise relocation project. Proc. 1992 Desert Tortoise Council Symposium. Abstract 58.

Wessman, E. V. 1977. The distribution and habitat preferences of the Mohave ground squirrel in the southeastern portion of its range. Unpublished report prepared on behalf of the California Department of Fish and Game; Report No.77-5 (1977). 15pp plus appendices.

Whistler, David P. 1990. A Late Pleistocene (Rancholabrean) Fossil Assemblage from the Northwestern Mojave Desert, California. *San Bernardino County Museum Association Quarterly*, Vol. XXXVI, No. 2. Redlands, CA.

Whitley, David. 2002. National Register Nomination Form, Ayers Rock. On file, Bureau of Land Management, Ridgecrest Field Office.

Wildlife Research Institute (WRI), 2002. Final Report for Western Mojave Aerial Raptor Survey. Report prepared for Antion Corporation and submitted to BLM, Barstow Field Office, Barstow, CA.

Williamson, N.L. October 1990. Construction aggregate shortages in the LA Basin; is ocean mining an alternative? Industrial Minerals, pp. 5.

Woodburne, Michael O. 1978. *Fossil Vertebrates in the California Desert Conservation Area*. Report Prepared As Part of the California Desert Conservation Area Management Plan. On File at the Bureau of Land Management. Barstow, CA.

Woodburne, Michael O. 1991. The Mojave Desert Province. *San Bernardino County Museum Association Quarterly* 38(3,4):60-77.

Woodman, A.P. and S.M. Juarez. 1988. Juvenile desert tortoises utilized as primary prey of nesting common ravens near Kramer, California. Paper presented at the 13th Annual Meeting and Symposium of the Desert Tortoise Council.

Woodman, A. and G. Goodlett. 1990. Estimated distribution and density of the desert tortoise at Fort Irwin, National Training Center and Goldstone Space Communications Complex. Prepared on behalf of U.S. Army Directorate of Engineering and Housing, Fort Irwin, National Training Center, CA. Requisition No. W81DBY-9115-3000. Ridgecrest, CA.

Woodman, A. P., S. M. Juarez, E. D. Humphreys, K. Kirtland, and L. F. LaPre. 1984. Estimated density and distribution of the desert tortoise (*Scaptochelys agassizii*) at Fort Irwin National Training center and Goldstone Space Communication Complex. Final report for U.S. Army Corps of Engineers. Contract No. DACA 09-83-M-0104.

Wright, L.A., R.M. Stewart, T.E.Gay Jr., and G.C. Hazenbush. 1953. Mines and mineral deposits of San Bernardino County, California. California Jour. Mines and Geology. vol. 49, nos. 1 and 2, pp. 247, tab. list.

WZI Inc. 1997. U. S. Borax, Inc. 1940 Acre Project Habitat Conservation Plan. Submitted to U. S. Fish and Wildlife Service, Ventura, CA.

Zigmond, Maurice. 1980. *Kawaiisu Ethnobotany*. University of Utah Press, Salt Lake City.

Zigmond, Maurice. 1986. Kawaiisu. In *Handbook of North American Indians, Vol. 11: Great Basin.* Warren L. D'azevedo, Vol. Editor. Smithsonian Institution, Washington